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PRINCIPLES OF MANAGEMENT

An Analysis of Managerial Functions

Principles of Management

AN ANALYSIS OF MANAGERIAL FUNCTIONS

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PREFACE

Perhaps there is no more important area of human activity than management, since its task is that of getting things done through people. Our modern civilization has increasingly become one of cooperative endeavor. Whether in business, government, the Church, philanthropic institutions, or other forms of enterprise, the effectiveness with which people work together toward the attainment of their joint goals is largely determined by the ability of those who hold managerial positions.

It is the recognition of this fact, especially in the light of the complexities and dynamics of modern society, that has led to an increasing emphasis on improving the managerial job and to an accelerated search for the principles that underlie it. Although the problem of management has existed as long as people have joined groups to accomplish goals that could not be gained individually, it has rather belatedly received intensified attention. The reflection, research, and analysis of many persons in managerial positions and of others who have had opportunities to observe management have led to the formulation of principles that aid in understanding the management process. However, these principles and techniques, isolated and unrelated, often lack a framework to which they can be joined systematically.

It is the purpose of this book to provide such a conceptual framework for the orderly presentation of the principles of management. In undertaking this task, the authors have drawn freely upon the discoveries, formulations, and researches of the many managers and scholars who have studied the problem. While attempts have been made at original formulation of principle from personal managerial experience and from observation of effective managers, the authors readily acknowledge a heavy debt to those who have made contributions to this important field.

At the outset, certain aspects of the authors' position should be made clear. It is their conviction that the job of the manager is essentially the same whether he is a first-line supervisor or the top executive of an enterprise. In any position where he is responsible for the cooperative accomplishments of others, he can get things done only through obtaining coordination of the group members. This task involves the utilization of principles quite different from those required by the expert accountant, economist, salesman, financier, or engineer. While the tasks undertaken by managers and the groups they head may vary and while a top executive may have a widely different area of authority from that of a lower supervisor, the fact remains that, as *managers*, all who obtain results through group endeavor do the same thing.

Moreover, as can readily be seen, the principles related to the task of management apply to any kind of enterprise. For the convenience of those interested primarily in business management, the present book relies most heavily for its case examples on problems of the business enterprise. In thus focusing their attention, however, the authors do not overlook the fact that the same principles are applicable elsewhere.

In order to have a logical framework within which to classify the principles of management, the authors have utilized the functions of the manager—organization, staffing, directing, planning, and controlling. It is recognized that there are other classifications of managerial functions, and with most of these the authors have no quarrel. It does seem to them, however, that the classification used here has the advantages of being comprehensive, of being divisible into enough parts to permit logical analysis, and of representing a reasonably accurate portrayal of the functions as managers themselves see them. Moreover, these functions sharply distinguish the job of the manager from the nonmanagerial activities of the specialist or technician.

The authors have chosen to deal with organization first and to postpone the discussion of planning until a later portion of the book. There are those who feel that a manager first plans, then organizes, then staffs, directs, and controls. There is some validity to this position; in practice, however, the manager undertakes all these functions simultaneously. Furthermore, there are advantages in starting with an analysis of organization, because it is an area in which principles are most thoroughly developed and one consequently easier to understand. In addition, the functions of planning and control are so closely related in logic and practice that there have appeared to be advantages in dealing with them together.

This book has been characterized as one dealing with principles. In a sense, it is an attempt to summarize a theory of management with primary application to the field of business. This does not mean that it is hypothetical or impractical. Principles are used here in the sense of fundamental truths applicable to a given set of circumstances, and a theory as a body of related principles dealing systematically with a subject. As such, principles, if accurately formulated, must and should be eminently practical.

It is from a formulation of such principles that a science of management can be developed and managers receive a better comprehension of their task. Yet, the authors feel strongly that, even though the development of such a science may clarify and simplify the practice of management, the managerial job will ever be to a great extent an art. As in medicine or surgery, there can be no substitute for clinical experience.

Although this book is a collaboration with both authors sharing equally in its preparation, the authors have attempted to make it an integrated work. Both have undertaken research in every area covered by the book and have pooled this and their personal experience through exchange of ideas, common formulation of principles, and joint writing and editing of the manuscript.

As might be expected in a book of this kind, the authors are indebted to so many persons that complete acknowledgment would be impossible. Some managers and scholars are acknowledged through footnote and other reference to their contributions. Many with whom the authors have worked in business, government, educational, and other enterprises have contributed by word and precept. While most must necessarily go unnamed, the authors would like to acknowledge with special gratitude certain business executives whose understanding of management has been especially helpful. It is a pleasure to record the debt owed to Noah Dietrich and F. W. Ayers of the Hughes Tool Company, E. Lee Talman of Lever Brothers, A. V. Leslie of Trans World Airlines, G. W. Carr of Marquardt Aircraft Company, and A. N. Curtiss of the Radio Corporation of America.

The authors wish to express their appreciation to Lyndall F. Urwick, eminent management scholar and practitioner, who offered many suggestions and criticisms of the outline and concepts incorporated in this book, and to Carroll Boyce, associate editor of *Factory* magazine, who read the entire manuscript and made many suggestions for its improvement. Dr. Neil H. Jacoby, Dean of the School of Business Administration at the University of California, Los Angeles, encouraged the authors to undertake this task, and his wise counsel has assisted them materially in the formulation of principles. The authors also wish to acknowledge the able assistance of Mrs. Michal Ingraham, for her help in some of the basic research, and of Mrs. Eleanor Rohrbeck, who assumed responsibility for the preparation of the manuscript.

Harold Koontz
Cyril O'Donnell

To

Mary and Elizabeth

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Policy, Planning Organization

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PART ONE

THE BASIS OF MANAGEMENT

I

THE PRESENT PATTERN OF BUSINESS MANAGEMENT

The coordination of human effort is the essence of all grouped activities, whether the objectives are business, military, religious, charitable, educational, or social. The fundamental component of this association is management—the function of getting things done through others. In bringing about this coordination of group activity, the manager plans, organizes, staffs, directs, and controls the activities of subordinates.

Not only is management essential in all cooperative enterprises; it is undertaken at all levels of organization. Management is not alone the function of the corporation president or the army general. It is also the function of the shop foreman or the company commander.

Since the organization of human beings for the attainment of a common purpose is as old as civilization itself, one would expect that, of all sciences, the science of management would be the most advanced. Despite the increasing complexity of modern civilization, however, and the recognized need for effective coordination, no such science has been developed, and many principles of management remain relatively unexplored. There has developed, nevertheless, in recent years an increasing awareness of the need for improving the quality of management in all enterprise and for searching out the principles that can serve as a basis for this improvement and for the betterment of group activity.

THE SHORTAGE OF MANAGERIAL MANPOWER

The number of managers in enterprises of all kinds in the United States is considerable. While no accurate current count is available, a recent study of a representative sample of firms in retailing, manufacturing, processing, and service disclosed that managers at all levels comprise 13.3 per cent of total employees.[1] If this percentage has general application, it can be estimated that late in 1953 there were approximately 7.3 million managers in the United States.[2]

This is a large segment of the American working population. But what is more important is that this group bears the responsibility of harnessing the energy and capacity of others and also has a tremendous influence over the satisfactions of large employee groups.

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[1] "How Many Managers?" *Management Review*, vol. 42, pp. 64–65 (February, 1953).

[2] *Business Outlook*, no. 749, sec. 2, p. 3 (Washington: Business Executive Publications, 1953). It is estimated from census and Labor Department statistics that the total work force in the fourth quarter of 1953 was 67.7 million, of which 3.2 million were in the military, 6.4 million in agriculture, and 3.5 million unemployed, leaving 54.6 million employees in other enterprises.

The shortage of managerial manpower has become a matter of increasing concern among leaders of business and of other enterprises. The point is made by some that only since World War II has management come to be recognized as a science rather than an art and that the tardiness of this recognition has resulted in a critical shortage of managerial manpower.[3] The increasing complexity of the management job, the expansion of business, and the failure to institute proper programs for the development of managers are noted as causes of this shortage.

The inadequacy of technical training. The shortage of managerial manpower is mainly traceable to a failure until recent years to recognize that managerial jobs require abilities not involved in mere technical know-how. The selection of managers on the basis of technical knowledge alone has failed to recognize that the essential characteristic of management is getting things done through others, thereby demanding skills that are essential in coordinating the activities of subordinates.

Business specialization and managership. In its preoccupation with gaining the economies of specialization of labor, business, as well as other forms of human endeavor, has emphasized the importance of technical specialization. Organizations have been formed around such specialized areas as production, sales, and finance, and individuals, trained in such skills as accounting, engineering, or law, have spent their business life in highly specialized contributions to the perfection of some technical process, the fulfillment of a single portion of an enterprise function, or the solution of technical problems involving things rather than human relationships.

This emphasis on specialization has clearly brought about economies in the use of labor, making possible the low costs that have broadened markets and increased the size of the firm, but, in doing so, it has magnified the problems of coordination and brought into focus the essential character of management.

The need for business statesmanship. What is needed in business management is a kind of statesmanship based on the assumption that managers have a unique responsibility in the scheme of human relations. Many a businessman, even in the upper levels of business, has been so engrossed in everyday problems that he has failed to realize that the direction of an enterprise and its effectiveness in reaching goals depend upon his ability to lead others, to plan, organize for effective cooperation, or discern tendencies toward or away from established goals.

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[3] Note, for example, statements of L. A. Appley, president of the American Management Association, in the Los Angeles *Times*, Oct. 22, 1951, p. 2.

The Present Pattern of Management

The present pattern of management calls peculiarly for the development and understanding of a theory of management. The pattern is characterized by complexities of many kinds. The growth of specialization, the increasing size of firms, the separation of ownership and management in the modern corporation, the rapid rise of government controls, and the impact of modern national unionism are among the evidences of the complexities of modern business.

Impact of the Industrial Revolution. Although the Industrial Revolution has often been regarded as a technical and social revolution, one of its most important results has been its impact upon the nature of organization and management. The separation of the worker from control over his work and his change from a member of a family group to a member of a large group of specialists have modified and complicated the job of management. The management of a small group can be effectively undertaken with the simple intuitions of leadership. Each member of the group can be directed personally, organization may be so informal as hardly to exist, planning may be limited to the moment, and overseeing be all the control required. But when a large number of persons are gathered together and their activities coordinated toward the attainment of a single objective, the managerial problem becomes the key to success or failure of the group.

The problem of coordinating the activities of the larger group has been accentuated by another characteristic of the Industrial Revolution. The machines used and the products made by members of the group are not ordinarily their property. Thus, the workers in a group do not necessarily have the same objectives as the owners. While both may share the desire to better themselves through the business activity and while the motivation may *appear* to be the same, the immediate objectives and the means of attaining them may be, and often are, entirely different.

It is an interesting commentary on modern civilization that the managerial problem has probably been one of the most neglected phases of the Industrial Revolution. While attention has been drawn to technical developments, or to new economic problems, the rise of the central problem of getting things done efficiently and effectively through others —the problem of management—has not received the study it deserves.

Separation of ownership and management in the modern corporation. Believed by some to be so fundamental a change as to constitute a revolution [4] are the effects wrought by the modern corporation. As corporate enterprises increase in size and as capital contributions come from many owners, the proportionate share of each owner tends to be smaller. Because of this dispersion of ownership and because the top manager group ordinarily uses the machinery for soliciting votes of stockholders through proxy, those in the management of large corporations have been able to perpetuate themselves in control or to name their successors.[5]

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[4] James Burnham refers to this change as the "managerial revolution." See his *Managerial Revolution* (New York: The John Day Company, Inc., 1941).

But it is significant that the separation of ownership and control in the modern corporation has tended to emphasize the role of the manager. A working board of directors, an executive group, or a dominant president must clearly understand their role as that of managing a large group of people toward the attainment of an enterprise purpose which will meet the approval of the market place and the general public. As a matter of fact, the sheer size and complexity of the operations of the larger modern corporation have made good management a necessity and have forced those responsible for business success to seek out basic principles of effective management.

The effect of government controls. The present pattern of business management is influenced materially by the number and extent of government controls. Not only have they complicated the tasks of management, but they have forced the business manager to give the government a share in policy determination. In fact, managers understandably have the feeling that the government sits in as a partner in the making of many decisions.

These controls take many forms. Under both state and Federal laws, businesses are subject to two general kinds of control designed to preserve and maintain the competitive system. One type is concerned with regulations against monopoly: through laws forbidding combination in restraint of trade or attempts to monopolize business, attempts are made to break down combinations which tend to endanger the competitive system. Another type of control outlaws practices, regarded by an administrative commission as unfair, which may lead to monopoly.

Another ever-broadening field of government control which affects the managerial job is the direct regulation of business economic decisions. This is the field of direct control over prices, the right to enter business, the quantity and quality of services rendered, the means used to finance the enterprise, the character of accounting records kept, the wages paid, and other matters of business decision. Until approximately two decades ago, most of the direct economic regulation of business was limited to a class of businesses characterized as being affected with the public interest. Regarded as being quasi-public in nature, they included transportation companies and public utilities. Direct economic regulation was justified on grounds of unique dependence of the public on their services, natural tendencies toward monopoly, and the fact that these businesses required and received public aids in the form of outright subsidies, use of public property, and rights of eminent domain.

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[5] See, for example, A. A. Berle and C. G. Means, *The Modern Corporation and Private Property* (New York: The Macmillan Company, 1932). See also R. A. Gordon, *Business Leadership in the Large Corporation* (Washington: Brookings Institution, 1945). In this study Gordon found that, out of a total of 176 corporations analyzed, management controlled with less than 1 per cent of the stock in 63 cases and with less than 5 per cent in 120 cases.

With the advent of the Great Depression, World War II, and the subsequent defense program, the distinction between quasi-public and private businesses has tended to disappear. On grounds of national emergency and with the extension of the power of government to regulate businesses in the interests of the public welfare, morals, health, and safety, direct economic regulation has been applied, to a greater or lesser extent, to all businesses. The establishment of ceiling prices, the allocation of materials and thereby control over the quantity of production, the outlawing of certain kinds of production on grounds of materials conservation, and many other business regulations have tended to become a permanent part of the program of a controllist government. While often justified as a temporary measure on grounds of emergency, the fact that "emergencies" tend to be ever present has given to many of these controls an appearance of permanence. In any case, so far as economic regulation is concerned, the line between quasi-public and private businesses no longer seems to be sharply drawn.

Although all aspects of direct government interference in business affect the functioning of management, one program of controls has had unusual effect. These are the regulations designed to protect the position of labor—controls over minimum wages, maximum hours of work, safety conditions of work, and insurance against the hazards of accidents, sickness, unemployment, and old age. Another set of regulations, designed to protect labor's rights to bargain collectively without interference and coercion, has encouraged labor organization and has placed the government in the center of the traditional conflict between management and labor. One important effect of these regulations has been to enforce the sharing of managerial authority with national unions which have little or no responsibility for the results of an individual business's managerial decisions. Another effect, since interference in the machinery of collective bargaining has extended to the actual settlement of labor disputes, has been to place the government in the position of virtually dictating many decisions on wages and working conditions.

A further inroad of government into the field of business management occurs when it undertakes to subsidize private business or enter into business itself. It is not always easy to distinguish between government controls, government aids, and government ownership. Many cases of control are accomplished through assistance measures. For example, assistance to American shipping is accompanied by controls over the manning of ships and the wages paid. Subsidies to airlines carry with them controls over the kinds of schedules flown. Even the right to withhold subsidies can have a powerful regulatory force. Moreover, there can be little doubt that the manager who has an umbrella of subsidy held over him is tempted to let that fact influence his policy determination. When government enters into business itself, its dealing with other businesses serves to regulate their conduct. The government is no ordinary competitor but a buyer or seller of unusual power, as managers of firms producing for the defense effort can well attest.

Far less direct, but nonetheless real, is the influence of government fiscal and taxation policy on business management. The cost of capital, the amount needed, and the level of costs and prices are among the factors strongly influenced by government fiscal policy. The extent and nature of taxation have tended to outweigh, in altogether too many instances, the traditional and socially important motivations of profit from sale. The same motive of enterprise profit may exist as a guide to the manager, but with the rise in taxes the highest profit too often results from a course quite different from the production of a maximum of goods and services at the lowest cost.

The impact of trade unions. The government's role in encouraging the development of trade unionism in American business has been noted. While the impact of this encouragement has been powerful in curtailing the authority of managers in their direction and control of subordinates, the influence of trade unionism itself has been even stronger. The manager, particularly in the past two decades, has had to look at his job, not only as one of achieving coordination of enterprise objectives with those of his subordinates, but also as one of developing an identity of objective with a nonsubordinate leader of a labor union. As labor organizations have developed and have come to control many aspects of the employee-manager relationships, much of the authority of subordinate managers over their workers has been transferred to the top-management level, where uniformity of policy in line with union agreements may be assured.

Awakening to the importance of the human element. Perhaps one of the contributions of the union movement to modern management has been to focus attention on the importance of the human element. By giving labor the dignity of a semi-independent contractor instead of a resource to be used in the production process, the modern trade-union movement has forced managers to reexamine their job. They have had to realize that the task of management is to bring about coordination of human effort and that the element which distinguishes the manager is his function of attaining an enterprise objective through the cooperation of people. This awakening to the importance of the human element may have taken extreme forms in the case of a few managers, who have perceived their job as that of making subordinates happy at any cost and have refused to make any business decisions unless every subordinate favors them. The truer awareness of the human element on the part of the more advanced segments of American management, however, is the knowledge that the task of the person managing subordinates is to weld them together as a working unit in the accomplishment of enterprise purpose.

The Need for Principles of Business Management

To suggest that there may exist a present set of principles, or one to be discovered, which will be applicable to the task of management, particularly in a business, is to bring forth immediately the fallacious distinction often drawn between theory and practice. There are many managers who hold to the familiar cliché that a matter may be "all right in theory but wrong in practice." This cannot be true. If a theory is comprised of principles which explain relationships and facts and if principles are fundamental truths explaining certain phenomena, as indeed they are, there can be no inconsistency between theory and practice. The theory may be inaccurate, or it may not be applicable to a given situation, but it can hardly be right and applicable and yet be impracticable.

Obviously, if a theory of management can be developed, it can have a tremendous impact upon the practice of management and the job of management will be simplified and improved. The very fact that in all fields of human endeavor, not the least of which is the field of business, the efficiency of human cooperation has lagged far behind that of machines appears to be proof enough that, if principles of management can be discovered and applied, the course of human progress will be improved. As an eminent physician has said: [6]

> The man of affairs without science is like the physician who has fallen out of the anatomy and physiology he may once have known; within limits he may be a shrewder and abler practitioner than an academic professor; but this will be at the cost of being stationary. . . . To principles, sooner or later, the subtlest craftsman has to bow his head; for, even while his hand is on his tools, by theory contingencies and complications are being detected and eliminated, and processes shortened and economised.

Management an art or science. There is hardly a manager who would not readily agree that his job has some of the qualities of an art—the use of skill or ingenuity, and the systematic application of knowledge in the accomplishment of a desired result.[7] As such, management is certainly an art. It is know-how—what Chester Barnard has called "behavioral knowledge." Science, on the other hand, involves the explanation of phenomena. It is a body of principles or laws, a systematized body of knowledge dealing with a problem area. As principles are discovered, verified, and applied in solving a problem, they become the working rules of an art.

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[6] T. E. Allbutt, "On Professional Education," quoted in L. Urwick, *The Elements of Administration* (New York: Harper & Brothers, 1943), p. 15.

Moreover, science and art are not mutually exclusive fields of endeavor but are complementary. As the science improves, so should the art, as has been proved in the physical and biological sciences. The physician without science becomes a witch doctor, the technical expert operating without regard to principles becomes an unsure workman, and the business executive who manages without theory must trust to luck and intuition.

Principles increase managerial efficiency. It can thus be seen that the establishment of principles of business management will inevitably improve managerial efficiency. If fundamental truths can be found and systematized in the activity of managers, chance decisions can be avoided. To the extent that these principles can be recognized and understood, the conscientious manager may, by their mere application, be able to answer many of his managerial problems, without engaging in original and laborious research.

This is not to imply that there exists now, or is likely ever to exist, so complete a body of management principles as to furnish formulas for the solution of all managerial problems. The frontiers of human knowledge have yet far to be pushed, and they have been extended much farther in the field of materials than in the more complex field of human relationships. But the lack of progress in searching for fundamental truths here should serve only to accelerate the efforts to find them: there are few problem areas of modern civilization which could bring more fruitful results.

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[7] As C. I. Barnard says in his *The Functions of the Executive* (Cambridge, Mass.: Harvard University Press, 1938), pp. 290–291: "It is the function of the arts to accomplish concrete ends, effect results, produce situations, that would not come about without the deliberate efforts to secure them. These arts must be mastered and applied by those who deal in the concrete and for the future. The function of the sciences, on the other hand, is to explain the phenomena, the events, the situations, of the past. Their aim is not to produce specific events, effects, or situations but explanations which we call knowledge. It has not been the aim of science to be a system of technology; and it could not be such a system. There is required in order to manipulate the concrete a vast amount of knowledge of a temporary, local, specific character, of no general value or interest, that it is not the function of a science to have or to present and only to explain to the extent that it is generally significant."

Principles crystallize the purpose of management. One of the problems in analyzing the managerial job and in training persons for effective managership is the lack of understanding of the principles of management. To the extent that principles have not been discovered and understood, it is difficult to prescribe the managerial functions.

Without principles, the training of managers, dependent upon trial-and-error techniques, tends to be haphazard. To some extent this *is* the case, for a science of management has been slow in developing and is currently inadequate. But the extent and success of management in business, government, and other enterprise support the view that a considerable body of principles does exist and that it serves increasingly to crystallize the purpose of management and simplify the task of training managers.

Impact of management principles on society. It is common knowledge that the culture of present-day society is characterized by revolutionary improvements in the physical and biological sciences and that the social sciences have lagged far behind. The significance of this state of affairs can hardly be overestimated, for unless man can learn to harness human resources and coordinate the activities of people, inefficiency and waste in utilizing technical discoveries will remain.

Basic social objectives are not difficult to discern. Man wishes happiness, health, material well-being, status, peace, security, and freedom. In most portions of the world, technical skill, materials, and manpower exist in quantities adequate to make possible to an unusual degree the attainment of these objectives. The economic theorists have accurately described underlying principles for the accomplishment of efficient production and the maximization of material resources. Other social scientists have discovered and described principles which can guide men toward the rather simple, personal objectives apparently held throughout the earth. Yet, one has only to look at the world turmoil, the lack of security and happiness, and the incredible waste of resources to realize that group objectives are not being attained.

Among the many reasons for our failure to channel our tremendous accumulation of knowledge and resources has been our inability to coordinate people so that individual objectives will be translated into group attainments. This, in a broad sense, is the job of management. Extension of the frontiers of management science, by increasing the efficiency of management, would unquestionably have revolutionary impact on the cultural level of our society.

In the narrower field of business management, the impact of management on society becomes clear. The primary function of business in society is to produce and distribute those goods and services necessary for material welfare. Economic theory has progressed far in explaining what courses of action will yield maximum output at least cost in labor and capital. But economic principles perforce assume that economic objectives can be translated into action through the coordination of human behavior. They are based upon the premise that the firm, as well as groups of firms, will be managed well.

As a matter of fact, one of the characteristics of communities or nations with a high material standard of living is that they have a high level of intelligence and skill in their managements of business. While ample raw materials and a favorable political climate have been major factors in accounting for the economic productivity of the United States, an equally important factor, particularly in the twentieth century, has been the relatively high quality of management in American business firms.

These facts serve to emphasize that, as management quality improves, efficiency in the utilization of human, as well as material, resources will grow. The improvement of the quality of management rests upon the discovery of applicable principles. For, as principles are discovered and utilized and as a body of management theory lays the proper groundwork for a science of management, it becomes more nearly possible to utilize the scientific approach toward the solution of human problems.

SELECTED REFERENCES

Appley, L. A., "A Current Appraisal of the Quality of Management," *Progressive Policies for Business Leadership,* General Management Series, No. 156. New York: American Management Association, 1952.

Barnard, C. I., *The Functions of the Executive.* Cambridge, Mass.: Harvard University Press, 1938.

Davis, R. C., *The Fundamentals of Top Management,* Chap. 1. New York: Harper & Brothers, 1952.

Fayol, H., *General and Industrial Management,* Chaps. 1–3. New York: Pitman Publishing Corporation, 1949.

Urwick, L., *The Elements of Administration,* Chap. 1. New York: Harper & Brothers, 1944.

———, *The Need Is Urgent to Make Leadership a Reality.* Toronto: Manufacturing and Industrial Engineering, 1952.

———, *Notes on the Theory of Organization,* Part 1. New York: American Management Association, 1952.

2

THE DEVELOPMENT OF A THEORY OF BUSINESS MANAGEMENT

With the pressing need for principles of management, one might well expect that a theory of the executive functions would be one of the most highly developed fields of social science. The fact that this is not true—that the development of a theory of business management has been confined to the last few decades and that businessmen generally are awakening only since World War II to the need for such a body of principles—seems somewhat surprising.

Delay in the Development of a Theory

In pointing to some of the reasons for the delay in the development of such principles, one cannot overlook those centuries in which business was held in low esteem. Although business institutions of insurance, credit, and marketing developed in the Middle Ages and although others were well formed by the time of the Industrial Revolution, business itself was regarded as a degrading occupation. Aristotle's characterization of buying and selling as "unnatural" management,[1] Adam Smith's disparaging remarks of businessmen,[2] and Napoleon's castigation of England as a "nation of shopkeepers" are evidences of this fact. Even in the past century, business was often regarded by the educated as a somewhat inglorious occupation. Indeed, one can say that only in the past half century has the businessman tended to hold a place of respect.

Another reason for the delay has been the preoccupation of economists with political economy and the nonmanagerial aspects of business. In their analysis of business enterprise and the development of philosophical precepts concerning business the economists generally followed the lead of Adam Smith, whose concern was for measures which would increase the wealth of a nation; of Ricardo, whose emphasis was upon the distribution of wealth to the factors of production; and of Alfred Marshall and others, who refined some of the marginal analyses in competitive and monopolistic marketing. The modern treatment of the economics of the individual firm is largely a development of the past two decades. Even the work of Chamberlin and Robinson, which has so changed the course of economic theory since 1933, assumes the existence of an efficient and effective business management. These preoccupations of the economist have not permitted him to examine the theoretical implications of the most significant aspect of business—the job of management.

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[1] In his *Politics and Ethics*, Aristotle wrote: "Of the two sorts of money-making, one is a part of household management, the other is retail trade: the former necessary and honorable, the latter a kind of exchange which is justly censured; for it is unnatural, and a mode by which men gain from one another."

[2] In his *Wealth of Nations* (New York: Modern Library, Inc., 1937) Adam Smith said of certain businessmen that they are "an order of men, whose interest is never the same with that of the public, who have generally an interest to deceive and even to oppress the public, and who accordingly have, upon many occasions, both deceived and oppressed it" (p. 250).

One might expect that political science would have been the father of a theory of management, since the effecting of policies is one of the major tasks of government and government itself the oldest and the most comprehensive form of social organization. Yet, despite its obvious importance, early political theorists were slow to turn their attention to the problem of administration. They, like the early economists, were too preoccupied with policy making on a national and international level and, therefore, largely overlooked the executive process, at least until recent years. Some of the early contributions to the theory of management, nevertheless, have come from scholars in the field of public administration, and important contributions have continued to come from this source at an accelerated pace.

To some extent the delay has also been due to the tendency to compartmentalize the disciplines within the broad field of social science, as in the failure to apply research of sociologists and psychologists to the area of business management. The theories of sociology concerning formal and informal organizations have only recently been applied to the functions of the business manager. Likewise, research of psychologists in the fields of individual motivation, reactions to authority, and the meaning and measurement of leadership has extended to business problems only in the past few years.

In addition to these factors, there is the widespread belief among managers in business, government, and other organizations that management is not susceptible to principles—that management is an art and not a science. It is interesting to note that the opening wedge to the present study of management as a science was driven by the so-called scientific management school of Frederick Taylor, whose interest was at the shop level.

Moreover, businessmen themselves have in the past discouraged the development of a theory of management. Too often their emphasis has been on technology, price, and the balance sheet—an orientation hardly conducive to the understanding of, and inquiry into, the job of the manager.

Recent Impetus to the Development of a Theory

The chief impetus to the development of a theory of business management has come in the past quarter century, as the result of the recognition that the missing link in the attainment of an effective enterprise system is human relations. The Great Depression following 1929 brought forth such symptoms of human unrest as the New Deal and national unionism and emphasized to alert businessmen that, among the deficiencies of American industrial development, perhaps the greatest was the concentration on the mere manipulation of resources. It is probably not too much to say that the upheaval of the 1930s and the attack by government and other social groups upon the institutions of free private enterprise were instrumental in forcing business managers to examine the nature of their job.

World War II and the subsequent defense programs were of even greater importance in the development of a theory of business management. The emphasis upon production with the least cost in materials and manpower focused attention on the job of the manager—at every level in an organization—as the strategic factor in accomplishing this objective. The importance of the manager in business, therefore, rather than being lessened by the end of World War II, has increased in the postwar years. For one thing, the siphoning off of some of the best young men to military programs during the war left a shortage of promotable manpower after the war. For another thing, the technical advances which accompanied the war further exaggerated the lag of managerial knowledge and ability behind technical knowledge.

It is true, also, that the decade of feverish productive activity set off by military preparation accelerated the movement toward larger and more complex business enterprises. The challenge to effective management naturally increases as business size increases. Thus, as business methods and products become more complex and relationships with other businesses, consumers, workers, and the government more intricate, the need for skilled management, even in the small firm, expands materially.

As might be expected, the urgency of the need has focused attention on it. Nor is it surprising that this attention has been paid primarily by the practitioners of management, so that the real lead in developing a relevant theory of management has come from the business executive himself and not the armchair philosopher or scientist.

Lawrence A. Appley, president of the American Management Association, has noted that the number of business executives who have awakened to this need is increasing at a tremendous rate.[3] He suggests that American management personnel may be divided into four groups. One group, which has traditionally regarded management as the manipulation of funds and exploitation of people, is fast disappearing from the American scene. A second group includes those whom Appley refers to as the "unaware and unfortunate"—that group of managers going ahead day by day in a routine way. The numbers in this group are declining materially. A third group, referred to as "sincere in desire and earnest in effort," includes the ever-growing mass of business managers, at all levels in organization, who are seriously trying to find explanations for the job of management. A fourth and slowly expanding group has been characterized by Appley as "clear in purpose and sound in action"; it is this group which not only senses the responsibilities of management but has developed, comprehended, and applied a philosophy of management based upon applicable principles.

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[3] "A Current Appraisal of the Quality of Management," *Progress Policies for Business Leadership*, General Management Series, No. 156 (New York: American Management Association, 1952), pp. 3–11.

This classification by so outstanding a student of management is an enlightening description of the growing awareness of a theory of management. As this awareness continues, as existing principles are understood and refined and new principles discovered, a comprehensive and vital theory of management appears to be assured. In fact, it may not be too extravagant to believe that the twentieth cenury, and particularly the latter half of it, will be marked in history as the management era.

Early Contributions to a Theory of Management

Despite the recent emphasis upon a theory of business management, one should not gain the impression that such an interest is a phenomenon of the past quarter of a century. The problems of management and attempts at their solution are as old as civilization itself.

Organization and management in antiquity. Interpretations of early Egyptian papyri, extending as far back as 1300 B.C., indicate the importance of organization and administration in the bureaucratic states of antiquity.[4] In the records of ancient China similar evidence may be found. Confucius's parables include practical suggestions for proper public administration, including admonitions to choose honest, unselfish, and capable public officers.[5]

Although the records and writings of the Greeks do not give much insight into the use and discovery of such principles, the very existence of the Athenian commonwealth, with its councils, popular courts, administrative officials, and board of generals indicates an appreciation of the managerial function. Socrates's definition of management as a skill separate from technical knowledge and experience is remarkably close to our recent understanding of the functions of the manager.[6]

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[4] See A. Lepawsky, *Administration* (New York: Alfred A. Knopf, Inc., 1949), pp. 78–81, and numerous original and secondary sources there quoted.

[5] L. S. Hsü, *The Political Philosophy of Confucianism* (New York: E. P. Dutton & Co., Inc., 1932), p. 124. For excerpts from this study as well as other sources of early Chinese works on administration, see Lepawsky, *op. cit.*, pp. 82–84.

The records of management in ancient Rome are incomplete, although it is well known that the complexity of the administrative job evoked considerable development of management techniques. The existence of the Roman magistrates, with their functional areas of authority and the degrees of their importance, indicates a scalar relationship characteristic of organization. Indeed, it has been said that the real genius of the Romans and the secret of success of the Roman Empire lay in their ability to organize. Through use of the scalar principle and the delegation of authority, the city of Rome was expanded to an empire with an efficiency of organization never before observed.[7]

The Roman Catholic Church. If one is to judge by age, the most efficient formal organization in the history of Western civilization has been the Roman Catholic Church. The success of its long organizational life has been due not only to the appeal of its objectives but also to the effectiveness of its organizational and management techniques. The development of the hierarchy of authority with its scalar territorial organization, the specialization of activities along functional lines, and the early use of the staff device are striking examples of such principles. The long and successful use of them is all the more remarkable in that, for centuries, their employment by the Church had virtually no influence on other organizations. In his study of this problem, Mooney believes that "nothing but the general neglect of the study of organization" can explain why the staff principle, which has been so important in the development of Catholic Church organization, did not appear as an effective organizational device in other activities until relatively recently.[8]

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[6] In his discourse with Nicomachides (Plato and Xenophon: *Socratic Discourses.* Book III, Chap. 4. New York: E. P. Dutton & Co., Inc., 1910), Socrates is reported to have made the following observations on management: "I say that over whatever a man may preside, he will, if he knows what he needs, and is able to provide it, be a good president, whether he have the direction of a chorus, a family, a city, or an army. . . . Is it not also the duty . . . to appoint fitting persons to fulfill the various duties? . . . To punish the bad, and to honour the good. . . . Do not, therefore, Nicomachides, despise men skillful in managing a household; for the conduct of private affairs differs from that of public concerns only in magnitude; in other respects they are similar; but what is most to be observed is, that neither of them are managed without men; and that private matters are not managed by one species of men, and public matters by another; for those who conduct public business make use of men not at all differing in nature from those whom the managers of private affairs employ; and those who know how to employ them, conduct either private or public affairs judiciously, while those who do not know, will err in the management of both."

[7] For an excellent analysis of the Roman genius for organization, see J. D. Mooney, *Principles of Organization* (rev. ed.; New York: Harper & Brothers, 1947), pp. 62–72.

Military organization. As might be expected, some of the more important principles and practices of modern business management may be traced to military organizations. Except for the Church, no other form of organization in the history of Western civilization has, over the years, been forced by the problems of managing relatively large groups to utilize organization principles. Yet, despite the need for management techniques and principles, military organizations failed to utilize them effectively until the past two centuries.

While military organization appears to have remained fairly simple until recent times, being limited largely to refinements of scalar authority relationships, armies have over the centuries improved the techniques of direction. Early armies, even those comprised of mercenaries, were characterized by effective morale and the identification of individual objectives with those of the group. History is replete with examples of military leaders who spent much time communicating their plans and objectives to their followers, thereby developing what Mooney calls a "unity of doctrine" in the organization. Even as autocratic a commander as Napoleon supplemented his power to command with a careful explanation of the purpose of his orders.

In more recent years, however, military organizations have applied other management principles. Among the most important of these has been the staff principle. Although the term "general staff" is found in the French army of 1790 and certain staff functions have characterized military organizations for many centuries, the modern concept of general staff is traced to the Prussian armies of the nineteenth century. This group, organized under a chief of staff, furnished specialized advice and information and supplied auxiliary services which have come to be essential features of military and business enterprises.

The cameralist school of public administration. The cameralists were a group of German and Austrian public administrators and intellectuals who generally held the same tenets as the British mercantilistic and the French physiocratic schools of political economy, which believed that, to enhance the position of a state, it was necessary to undertake methods to maximize material wealth. But the cameralist school, which flourished from the sixteenth to the eighteenth century, emphasized, unlike the mercantilists and physiocrats, systematic administration as a source of this strength and was one of the earliest groups, therefore, to exalt systems of administrative technology.[9]

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[8] *Ibid.*, p. 117. For an interesting analysis of organizational principles utilized by the Church, see Chaps. 12–14.

The cameralists believed as well in the universality of management techniques, noting that the same qualities which increased an individual's wealth were called for in the proper administration of the state or any of its departments. In developing certain principles of this administrative technology, they emphasized such matters as specialization of function, care in training and selection of subordinates for administrative positions, establishment of the important office of comptroller in government affairs, expediting legal processes, and simplification of administrative procedures.

Taylor and the Principles of Scientific Management

Although Frederick W. Taylor is properly called the founder of modern scientific management, it is likewise true that the roots of his principles of management are found in earlier writings. Like other cultural developments, the principles of scientific management were discovered as the occasion for their use arose. The rise of large industry, the utilization of expensive machinery, and the perfection of the factory system furnished the impelling forces for the new emphasis on the problems of management.

Although Taylor's principles were intended for broad application, the actual emphasis was not on the general management of enterprise but on management at the shop level. Taylor was concerned with the efficiency of workers and the job of the manager in the production of goods. Unfortunately, this preoccupation screened out the need for discovering and utilizing management principles at all levels of business activity and in all functions of business.

Taylor's precursors. According to some scholars, the origins of the scientific management school may be traced to the early nineteenth century and the treatise of Charles Babbage on *The Economy of Manufacturers*, published in 1832. But Babbage's "time observation" in the manufacture of pins has been traced to an even earlier French pin manufacturer, Perronet.[10] As Oliver Sheldon has pointed out, contributions such as this may be traced back indefinitely, for as he remarks: [11]

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[9] For one of the most scholarly analyses of cameralism, see A. Small, *The Cameralists* (Chicago: University of Chicago Press, 1909).

[10] H. S. Person, "The Genius of Frederick W. Taylor," *Advanced Management*, vol. 10, p. 4 (January–March, 1945).

[11] O. Sheldon, "The Development of Scientific Management in England," *Harvard Business Review*, vol. 3, p. 129 (January, 1925).

> Each generation has doubtless had its scribe who thought scientifically about the ploughing of the soil, the throwing of the shuttle, the beating of the iron, or the hewing of the trees. Then came the day when the ploughman, the weaver, the smith and the woodman discarded the old tools of their crafts, and strode amazedly into the towns where the new factories reared their ugly forms. . . . So finally, the torch was handed on from one generation to another, till, amid the immense structure of American industry, it passed to the hand of Frederick Taylor.

Frederick Taylor and scientific management. Despite a thorough liberal education in American and European schools, Frederick W. Taylor received training as a machinist during the depression of 1873 and took a position in 1878 in the plant of the Midvale Steel Company in Philadelphia. Rising rapidly, he became chief engineer of the plant in 1884. During these years and in those thereafter, Taylor devoted much of his time to analyzing the nature of shopwork, measuring carefully with stop watch, tape, and scales the actions of workers in the handling of materials and the operation of machines. Imbued with the belief that the science of the engineers could be applied to the methods of the shop, Taylor searched for the "one best way" and came to the conclusion that a very large percentage of both labor and material was wasted through inefficient organization and supervision of work.

While he did not propose a statement of general principles of management until 1911, the efficiency movement which he started had become a national issue by that time. Labor unions opposed Taylor's methods as a brand of "speed up," strikes against his system of shop management followed, and Congress investigated this new movement.[12] Indeed, so strong were the objections to Taylor's system that Congress attached a rider to the military appropriations bill, prohibiting the use of the funds for any "time study with a stop watch or other time-measuring device." [13]

Principles of scientific management. Taylor is perhaps best known for his famous work, *The Principles of Scientific Management,* published in 1911. Despite his apparent intent to provide principles applicable to management, Taylor's emphasis continued to be on efficiency of human beings and machines through the medium of time and motion study, which has been referred to as the "cornerstone of scientific management." [14]

Perhaps the principal merit of Taylor's work from the standpoint of management theory is his insistence upon the application of scientific methods to problems of management. While he was preoccupied with efficient production at the shop level, his contribution to management theory is nonetheless significant.

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[12] House of Representatives, *Hearings before Special Committee to Investigate the Taylor and Other Systems of Shop Management,* 62d Cong., 1st sess., 1912.

[13] Lepawsky, *op. cit.*, p. 121.

[14] R. F. Hoxie, "Scientific Management and Labor Welfare," *Journal of Political Economy,* vol. 24, p. 838 (November, 1916).

Thus, in his *Principles of Scientific Management,* Taylor held that the paper had been written: [15]

> *First.* To point out, through a series of simple illustrations, the great loss which the whole country is suffering through inefficiency in almost all of our daily acts.
>
> *Second.* To try to convince the reader that the remedy for this inefficiency lies in systematic management, rather than in searching for some unusual or extraordinary man.
>
> *Third.* To prove that the best management is a true science, resting upon clearly defined laws, rules, and principles, as a foundation. And further to show that the fundamental principles of scientific management are applicable to all kinds of human activities, from our simplest individual acts to the work of our great corporations, which call for the most elaborate cooperation. And, briefly, through a series of illustrations, to convince the reader that whenever these principles are correctly applied, results must follow which are truly astounding.

In developing his theory, Taylor pointed out that a new philosophy of management was involved, a philosophy under which management would take more responsibility for planning and supervision and for reducing the knowledge of labor and machine techniques to rules, laws, and formulas, thereby "immensely" helping workers to do their work at lower cost to the employer and with higher returns to labor. Taylor saw several new functions for managers: (1) replacing rule-of-thumb methods with scientific determination of each element of a man's work; (2) scientific training and selection of workmen; (3) cooperation of management and labor to ensure the accomplishment of work in accordance with scientific method; and (4) a more equal division of responsibility between managers and workers, with managers taking responsibility for planning and organizing of work.[16]

Scientific management and the theory of management. Taylor's emphasis upon the application of scientific method to problems of management was his chief contribution to the development of theory, but his emphasis on organizing work, on planning, and on proper training and supervision also opened approaches to the job of the manager. Taylor's contributions, however, were not an unmixed blessing: through his stress on efficiency at the shop level and economies gained through time and motion study, he caused attention to be drawn so completely to the shop that the study of management became in effect the study of shop management, while the more general aspects of management, particularly in the United States and Great Britain, were too often overlooked. As will be noted presently, had the work of the French industrialist, Henri Fayol, not been so overshadowed by the enthusiasm for Taylorism, the history of management theory might well have been changed and the principles of general management advanced much earlier.

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[15] F. W. Taylor, *The Principles of Scientific Management* (New York: Harper & Brothers, 1911), p. 7.

[16] *Ibid.*, pp. 36–38.

Fayol's Thesis of the Universality of Management Principles

Perhaps the real father of modern management theory is the French industrialist, Henri Fayol. Although there is little evidence that management scholars, either in England or in the United States, paid much heed to, or knew much about, Fayol's work until the 1920s or even later, his acute observations on the principles of general management first appeared in 1916 in French under the title of *Administration industrielle et générale*. While this monograph was reprinted in French several times, it was not translated into English until 1929; even then it was printed by the International Institute of Management at Geneva, and only a few copies were made available for sale in Great Britain. No translation in English was published in the United States until 1949, although the work of Fayol was brought to the attention of American management scholars by Sarah Greer's translation in 1923 of one of Fayol's papers, later incorporated in a collection of papers by Gulick and Urwick.[17] In this same collection, the more general aspects of Fayol's works were referred to in a paper by the British management consultant and scholar, Lyndall Urwick.[18]

Thus, even though Fayol's monograph did not appear in the United States in a form for general reading until 1949,[19] and despite the fact that few in this country knew of Fayol's work until 1937—more than two decades after its original publication and more than a decade after the author's death—a study of Fayol's monograph, with its practical and clear approach to the job of the manager and his perception of the universality of management principles, discloses an extraordinary insight into the problems which beset business management today. Indeed, even though the thinking of certain students of management was clearly affected by Fayol long before his work was brought to the attention of the general public, one regrets that all serious students of business management did not have the advantage of Fayol's analysis. Most of those who have contributed to the principles of business management—such as Sheldon, Dennison, Mooney, and Barnard—show little evidence of having been familiar with the writings of Fayol.

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[17] L. Gulick and L. Urwick (eds.) *Papers on the Science of Administration* (New York: Institute of Public Administration, 1937). Fayol's paper was translated by Miss Greer as "The Administrative Theory of the State."

[18] *Ibid.*, "The Function of Administration."

[19] H. Fayol, *General and Industrial Administration* (London: Sir Isaac Pitman & Sons, Ltd., 1949). Most of the bibliographical material used here has been drawn from Urwick's interesting introduction to this edition.

Fayol and his work. Henri Fayol, born in 1841, was graduated as a mining engineer in 1860 from the National School of Mines at St. Étienne. Taking a position, in 1860, as engineer with a coal mining company, the Commantry-Fourchambault company, he rose to be managing director in 1888. At the time, the firm was nearly bankrupt. When he retired thirty years later, the company had expanded into a large coal-steel combine with a strong financial position and a long record of profits and dividends.

During his long and successful career as an industrial executive, Fayol searched for practical and simple principles which could be used in explaining the job of the manager. In the course of his reflections on this problem he delivered two lectures, in 1900 and 1908, on the general principles of administration and followed these in 1916 with his now-famous monograph on *General and Industrial Management*. After retiring from his executive position in 1918, Fayol devoted himself to popularizing his principles of management. Not only did he establish a Center of Administrative Studies in Paris, but he also attempted, when he investigated the Department of Posts and Telegraphs, to apply his principles to government administration.

Some persons are inclined to compare Fayol and Taylor. As a matter of fact, when Fayol undertook to popularize his management theories after 1918, there were those who felt that Fayol's principles were in competition with Taylor's. But Fayol himself sought to dispel this belief, and Urwick has said generously of the works of these two men: [20]

> The work of Taylor and Fayol was, of course, essentially complementary. They both realized that the problem of personnel and its management *at all levels* is the "key" to industrial success. Both applied scientific method to this problem. That Taylor worked primarily on the operative level, from the bottom of the industrial hierarchy upwards, while Fayol concentrated on the Managing Director and worked downwards, was merely a reflection of their very different careers. But Fayol's capacity to see and to acknowledge this publicly was an example of his intellectual integrity and generosity of spirit. They gave France a unified management body more than twenty years before the same ideal began to be realized in Great Britain.

Fayol's general and industrial management. Fayol wrote as the practical man of business reflecting on his long managerial career and setting down the principles he had observed and practiced. In doing so, he made no attempt to develop a logical theory of management or a self-contained philosophy of the managerial process. His observations, however, fit amazingly well into the currently developing mold of management theory.

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[20] *Ibid.*, pp. ix–x.

Fayol found that all activities of industrial undertakings could be divided into six groups: (1) technical (production); (2) commercial (buying, selling, and exchange); (3) financial (search for, and optimum use of, capital); (4) security (protection of property and persons); (5) accounting (including statistics); and (6) managerial (planning, organization, command, coordination, and control).[21] Pointing out that these activities exist in any size of business, Fayol observed that the first five groups of activities were well known and consequently devoted most of his book to an analysis of managerial activities.

While there will be many occasions to refer to Fayol in succeeding pages, it will be helpful at this point to outline briefly the contents of his remarkable monograph. The book may be divided into observations on managerial qualities and training, general principles of management, and the elements of management. Fayol distinguished between principles and elements by reserving the former term for rules or guides and the latter for functions.

Managerial Qualities and Training. Fayol, approaching his study of management from the point of view of the qualities required by personnel of various undertakings, found them to be physical ("health, vigor, address"), mental ("ability to understand and learn, judgment, mental vigor, and adaptability"), moral ("energy, firmness, willingness to accept responsibility, initiative, loyalty, tact, dignity"), qualities of general education ("general acquaintance with matters not belonging exclusively to the function performed"), those of special knowledge ("that peculiar to the function") and of experience ("knowledge arising from the work proper").[22] He also identified requisite abilities in accordance with the six principal activities of a concern, classifying them as managerial, technical, commercial, financial, security, and accounting abilities.

With rare insight, amply confirmed in more recent studies, Fayol observed that, while the most important ability on the part of the worker is technical ability, the relative importance of managerial ability increases as one goes up the scalar chain, becoming the most important ability on the part of the higher managers in a business. On the basis of this conclusion Fayol held that there was a widespread need for principles of management and for management teaching.

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[21] *Ibid.*, p. 3.

[22] *Ibid.*, p. 7.

Decrying the lack of management teaching in the technical schools of his time, Fayol held that managerial ability should be acquired in the same way as technical ability, first in the schools and later in the workshop. Feeling that the explanation for this lack lay in the absence of a well-developed and accepted theory of management, he set himself, shortly after the opening of the twentieth century, to fill this need in a manner which, if followed more assiduously by succeeding scholars of management, would probably have closed a gap which still exists today.

General Principles of Management. Warning his readers that principles of management are flexible and not absolute, but must be utilized in the light of changing and special conditions, Fayol listed fourteen principles of management which had grown out of his experience.[23] They may be summarized as follows:

1. Division of work. This is the principle of specialization which is so well expressed by economists as being necessary to efficiency in the utilization of labor. Fayol goes beyond shop labor to apply the principle to all kinds of work, managerial as well as technical.
2. Authority and responsibility. In this principle Fayol finds authority and responsibility to be related, with the latter the corollary of the former and arising from the former. He conceives of authority as a combination of official authority, deriving from a manager's official position, and personal authority, "compounded of intelligence, experience, moral worth, past services, etc."
3. Discipline. Holding that discipline is "respect for agreements which are directed at achieving obedience, application, energy, and the outward marks of respect," Fayol declares that discipline requires good superiors at all levels, clear and fair agreements, and judicious application of penalties.
4. Unity of command. This is the principle that an employee should receive orders from one superior only.
5. Unity of direction. According to Fayol, unity of direction is the principle that each group of activities having the same objective must have one head and one plan. As distinguished from the principle of unity of command, Fayol perceives unity of direction as related to the functioning of the "body corporate," while unity of command is related to the functioning of personnel.
6. Subordination of individual interest to general interest. In any group the interest of the group should supersede that of the individual; when these are found to differ, it is the function of management to reconcile them.
7. Remuneration of personnel. Fayol perceives this principle to be that remuneration and methods of payment should be fair and afford the maximum satisfaction to employee and employer.
8. Centralization. Although Fayol does not use the term "centralization of authority," his principle definitely refers to the extent to which authority is

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[23] *Ibid.*, Chap. 4.

concentrated or dispersed in an enterprise. Individual circumstances will determine the degree of centralization that will "give the best over-all yield."

9. Scalar chain. Fayol thinks of the scalar chain as a line of authority, a "chain of superiors" from the highest to the lowest ranks, and held that, while it is an error for a subordinate to depart "needlessly" from lines of authority, the chain should be short-circuited when scrupulous following of it would be detrimental.

10. Order. Breaking this principle into "material order" and "social order," Fayol thinks of it as the simple adage of "a place for everything (everyone), and everything (everyone) in its (his) place." This is essentially a principle of organization in the arrangement of things and persons.

11. Equity. Fayol perceives this principle as one of eliciting loyalty and devotion from personnel by a combination of kindliness and justice in managers dealing with subordinates.

12. Stability of tenure of personnel. Finding that such instability is both the cause and effect of bad management, Fayol points out the dangers and costs of unnecessary turnover.

13. Initiative. Initiative is conceived of as the thinking out and execution of a plan. Since it is one of the "keenest satisfactions for an intelligent man to experience," Fayol exhorts managers to "sacrifice personal vanity" in order to permit subordinates to exercise it.

14. *Esprit de corps.* This is the principle that "union is strength," an extension of the principle of unity of command. Fayol here emphasizes the need for teamwork and the importance of communication in obtaining it.

In concluding his discussion of these management principles, Fayol observed that he had made no attempt to be exhaustive but had tried only to recite those he had had the most occasion to use. Moreover, he made the point that some kind of codification of principles appeared to be indispensable, for in every undertaking, whether it be in commerce, politics, religion, philanthropy, or war, a management function had to be performed.

Elements of Management. As has been indicated, Fayol regarded the elements of management as its functions. He perceived these to be planning, organizing, command, coordination, and control.[24] A large part of his treatise is given to an examination of these functions, and his observations are, on the whole, still valid, even after more than four decades of study and experience by others in the field.

Fayol placed considerable emphasis upon the importance of the managerial function of *prévoyance,* or "looking ahead." As he said, "To foresee . . . means both to assess the future and make provision for it." Such planning, according to Fayol, is manifested primarily by the plan of action, which is "at one and the same time, the result envisaged, the line of action to be followed, the stages to go through, and methods to use." Good planning, he held, requires unity, flexibility, continuity, and precision, while lack of planning or bad planning is a sign of managerial incompetence. Interestingly enough, Fayol makes much of forecasting, showing how his company utilized yearly and ten-yearly forecasts as the central feature of its planning program.

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[24] *Ibid.,* Chap. 5.

In describing the function of organizing, Fayol took a broad view, holding that "to organize a business is to provide it with everything useful to its functioning: raw materials, tools, capital, personnel." The organizing function of managers was one, he said, of establishing human and material relationships consistent with the objectives and resources of the concern, of harmonizing activities and providing for clear and precise decisions through unity of command,[25] and of providing for careful selection and training of subordinates.

Although treated as a part of organizing, managerial training received special emphasis in Fayol's work. He was particularly interested in formal training, deploring the long periods of training for engineers and overtraining in mathematics[26] and advising engineers not to neglect general education but to study, in or out of college, management, commerce, and accounting. Fayol also declared that a sign of good management in an enterprise is the "steady, methodical training of all employees required and at all levels." He further recommended management training in the home and in the public schools.

Fayol conceived of the function of command as the operation of organization. He pointed out that command called for exceptional qualities on the part of the manager, who must (1) "have a thorough knowledge of his personnel"; (2) "eliminate the incompetent"; (3) "be well versed in agreements binding the business and its employees"; (4) "set a good example"; (5) "conduct periodic audits of organization and use summarized charts to further this"; (6) "bring together his chief assistants by means of conferences, at which unity of direction and focusing of effort are provided for"; (7) "not become engrossed in detail"; and (8) "aim at making unity, energy, initiative and loyalty prevail among personnel." Thus, as will be noted in succeeding chapters, Fayol's concept of command as a function of managers is far beyond command as a technique but is rather the viewing of command as direction of subordinates.

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[25] It is interesting in this connection that Fayol, while paying great respect to Taylor's genius, took issue with his flaying of the military type of organization and its principle of unity of command. Fayol's concern over Taylor's functional foremanship, under which the job of the foreman was specialized and each worker had a number of supervisors, has been well supported by experience, since this disregard of the principles of unity of command by Taylor has been thoroughly discredited. For Fayol's observations, see *ibid.*, pp. 66–70.

[26] *Ibid.* On page 84, Fayol claims that "long personal experience has taught me that the use of *higher* mathematics counts for nothing in managing businesses and that engineers, mining or metallurgical, scarcely ever refer to them."

In speaking of coordination as the task of harmonizing activities to ensure success, Fayol had difficulty in making this function stand out clearly from command, or even from organizing and planning. This is understandable. While no one would deny the great importance of coordination and the manager's responsibility for effecting harmony, it apparently did not occur to Fayol that coordination is, in reality, the sum total of managing.

Fayol's concept of control is essentially that held by modern students of management. He thought of control as the process of "verifying whether everything occurs in conformity with the plan adopted, the instructions issued and principles established." He believed that effective control must be prompt, must be followed up with sanctions, and must include measures to prevent recurrence of deviations. These are proper considerations, and modern management practice has added little to the concept except the use of forecasts, so that control may be exercised before deviations occur. Although Fayol recognized the importance of planning and forecasting, there is no evidence that he thought of relating these closely to the function of control.

Fayol's thesis of the universality of management principles. Throughout Fayol's treatise, there exists an understanding of the universality of principles. Again and again, he points out that these apply not only to business enterprise but also to political, religious, philanthropic, or other undertakings. All enterprise requires management, and the formulation of a theory of management is necessary to provide effective teaching of this all-important function.

The Emergence of a Theory of Management

Since the time of Fayol and Taylor, there has been developing at an increasing rate a theory of management of universal application. Although long neglected in favor of research into the more technical and functional aspects of behavior, the realization of the peculiar role of the manager and the desire to improve his effectiveness through selection, training, and self-appraisal have resulted in an increasing volume of research in this field. While it is impossible to recount here all the more significant contributions to a theory of management, one can note some of the most important.

Contributions of public administration theorists. Coincident with the scientific management movement and encouraged by it, a number of scholars attempted to bring about increased efficiency in government by improved personnel practices and more effective management. One of the leading apostles of this movement was Woodrow Wilson, who, as early as 1885 and on many occasions in later years, sounded the call for efficiency in government.[27] In a quest for economy and efficiency, those interested in public administration have naturally placed great stress on organization, personnel practices, budgetary controls, and planning: to these fields many public administrators and political scientists have made major contributions. Among these are scholars such as Luther Gulick, with his observations on government organization and his long research in the application of scientific methodology to public administration,[28] and such other pioneers as White,[29] Gaus,[30] Friedrich,[31] Stene,[32] Dimock,[33] Simon,[34] and Merriam,[35] who have approached the field, not only as practical public administrators, but as university scholars.

Contributions of business managers. Perhaps the most significant contributions to the field of management theory have been made by businessmen, of whom Henri Fayol has previously been cited. There may be several reasons for this fact. In the first place, the job of effective management has been so difficult, and the results of poor management so serious to the individuals in top managerial positions that the search for management principles has been a search for the means of self-preservation. In the second place, the problem of management has probably been brought into sharper focus in business than in government or other fields, where political or social objectives have tended to overshadow questions of administrative efficiency. A further influence, particularly in more recent years, has been the proper feeling that private enterprise is on trial and that the key to its successful operation is management.

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[27] See, for example, his *Congressional Government* (Boston: Houghton Mifflin Company, 1885) and "The Study of Administration," *Political Science Quarterly*, vol. 2, pp. 197–222 (June, 1887). Note also, with regard to developments in Great Britain, D. B. Eaton, *Civil Service in Great Britain* (New York: Harper & Brothers, 1880).

[28] See "Notes on the Theory of Organization" and "Science, Values and Public Administration," in L. Gulick and L. Urwick (eds.) *Papers on the Science of Administration* (New York: Institute of Public Administration, 1937).

[29] L. D. White, *Introduction to the Study of Public Administration* (New York: The Macmillan Company, 1939).

[30] J. M. Gaus, "The Responsibility of Public Administration," in J. M. Gaus, L. D. White, and M. E. Dimock (eds.), *The Frontiers of Public Administration* (Chicago: University of Chicago Press, 1936), pp. 26–44; also (with L. O. Wolcott) *Public Administration and the U.S. Dept. of Agriculture* (Chicago: Public Administration Service, 1941).

[31] C. J. Friedrich, *Constitutional Government and Politics* (New York: Harper & Brothers, 1937); also *Responsible Bureaucracy* (Cambridge, Mass.: Harvard University Press, 1932); and "Public Policy and the Nature of Administrative Responsibility," *Public Policy* (Cambridge, Mass.: Harvard University Press, 1940).

[32] E. O. Stene, "An Approach to a Science of Administration," *American Political Science Review*, vol. 34, pp. 1124–1137 (December, 1940).

[33] M. E. Dimock, "The Criteria and Objectives of Public Administration," in Gaus, White, and Dimock, *op. cit.*, pp. 116–133.

[34] H. A. Simon, *Administrative Behavior* (New York: The Macmillan Company, 1950); also, *Determining Work Loads for Professional Staff in a Public Welfare Agency* (Berkeley, Calif.: University of California Bureau of Public Administration, 1941); and *Public Administration* (New York: Alfred A. Knopf, Inc., 1950).

[35] C. E. Merriam, *Political Power: Its Composition and Incidence* (New York: McGraw-Hill Book Company, Inc., 1934); also, *The New Democracy and the New Despotism* (New York: McGraw-Hill Book Company, Inc., 1939).

One of these early writers was Russell Robb, who in 1910, in the Graduate School of Business Administration at Harvard, gave a special group of three lectures on organization.[36] Drawing from his business experience, Robb saw organization as a tool for the efficient utilization of manpower and materials, a tool which had to be suited to the circumstances of each enterprise, but one which could also be overused. Robb was one of the first to warn of overorganization.[37] Emphasizing the importance of definiteness with respect to authority, as well as that of harmony and "team play," Robb warned of the danger that too much functional specialization in business organization would result in problems of coordination.

Of the comprehensive works on management, perhaps one of the most significant is *The Philosophy of Management*, written in 1923 by the scholarly British industrial consultant, Oliver Sheldon.[38] Like Fayol, Sheldon sought to formulate a theory of "management as a whole," through defining its purpose, tracing its line of growth, and spelling out the principles which govern its practice. Sheldon thought of management in broad terms, as including determination of policy and coordination of functions (administration), the execution of policy and employment of organization (management proper), and the process of combining the work of individuals or groups "with the faculties necessary for its execution" (organization).[39] Although Sheldon stressed such matters as the social responsibilities of management and examined functional fields of management, such as personnel ("labour management") and production management, many of his principles are similar to those of Fayol. One gets the impression from Sheldon's work, however, that he did not have Fayol's breadth of understanding and that, except for organization, he did not see the functions of managers as having general application. For example, his discussion of planning revolves primarily around factory planning.[40]

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[36] *Lectures on Organization* (privately printed, 1910), Catheryn Seckler-Hudson (ed.), *Processes of Organization and Management* (Washington, D.C.: Public Affairs Press, 1948), pp. 99–124, 269–281.

[37] In speaking of organization to control costs, Robb sagely remarks: "While it pays to know costs, it also pays to find out how much it costs to know costs" (p. 45).

[38] O. Sheldon, *The Philosophy of Management* (London: Sir Isaac Pitman & Sons, Ltd.)

[39] *Ibid.*, p. 32. It is interesting that Sheldon drew these concepts of the function of management from an American, J. N. Shultze, in a paper read before the Taylor Society in 1919.

Another important contribution by a businessman to the early development of management theory is that of Henry Dennison, Massachusetts industrialist, whose advanced management techniques in the Dennison Manufacturing Company permitted him to explore the principles of management. In a book published in 1931,[41] Dennison set out to study the scientific aspects of management, particularly organization, and ascertain whether the methods of the engineer might not be applicable to this field. In doing so, Dennison developed concepts of motivation, leadership, and teamwork and analyzed the structural factors of organization in their effects on personalities. Although Dennison did not develop a theory of management, his emphasis upon human engineering and the role of leadership in management has made his contribution significant.

Perhaps the most illuminating attempt by businessmen to develop a logical framework for the theory of organization is in the work of Mooney and Reiley.[42] Drawing upon lessons from history, particularly that of the church and military organizations, these authors undertook to combine organizational principles into a logical pattern of principle, process, and effect. Starting with the principle of coordination, they moved into the concepts of scalar organization and functionalism, arriving by triads at a total of nine principles of organization. While the work of Mooney and Reiley has been criticized as being too doctrinaire,[43] it represents a logical approach for relating fundamental principles of organization to one another.

One of the most influential and comprehensive treatises in this field is Chester I. Barnard's *The Functions of the Executive*, published in 1938.[44] During his long career as a business executive, Barnard was impressed with the need for some universal fundamentals to explain the executive's job and help him improve his ability as a manager. Drawing heavily upon the research of sociologists and, to some extent, of psychologists, Barnard produced an extraordinarily provocative work. His treatise is, as he points out in the introduction, in reality two short treatises. One deals with the theory of organization, the other with the functions of executives. His theory of organization, heavily sociological in approach, moves from the principles of group cooperation to those of formal organization. His principles of executive functions lean heavily on his theory of organization and consequently place great stress on the leadership aspects of managerial functioning and the importance of communication. Another noteworthy contribution is his examination of the decision-making process, with particular attention to the search for strategic factors.

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[40] Note that Sheldon defines planning as "the business of directing and controlling the processes of production to a given end" (p. 218).

[41] H. S. Dennison, *Organization Engineering* (New York: McGraw-Hill Book Company, Inc., 1931).

[42] First published as J. D. Mooney and A. C. Reiley, *Onward Industry* (New York: Harper & Brothers, 1931), it later appeared with slight modifications as *The Principles of Organization* (New York: Harper & Brothers, 1939). A later edition, in 1947, appeared with only the name of Mooney as author.

[43] Lepawsky, *op. cit.*, p. 253.

[44] Cambridge, Mass.: Harvard University Press, 1938.

Barnard's work is so comprehensive and rewarding that his principal contributions to the emerging management theory cannot be summarized. It can be said, however, that his contribution is as much a matter of provocation as it is of content, for he opens many vistas for the further pursuit of management principles.

Among other contributions by business and professional management people, one should not overlook the crisp reasoning and syntheses of Lyndall Urwick,[45] the papers of Mary Parker Follett,[46] or the pioneering work of Ordway Tead[47] and Paul Holden,[48] to mention only a few. Nor should one overlook the tremendous force which has been exerted by the Society for the Advancement of Management and the American Management Association. The latter organization particularly has its roots in the top managerial group in this country, its members being drawn mostly from the alert group of business managers who sincerely seek a scientific foundation for their managerial jobs. The Society for the Advancement of Management, an equally important group, is an outgrowth of the Taylor Society, and much of its emphasis has been upon the production management aspects of the general management problem.

It is unquestionably true that the major contributions to date have come from persons to whom the practice of management has been a real and challenging task. This fact speaks well for the importance of the field and the realism with which it is being approached.

Contributions of sociologists and psychologists. Although few sociologists or psychologists have been interested in the general problems of management, their contributions to the development of management theory have been considerable. The sociologists have contributed much to the anatomy of organization through their work on groups, group behavior, and leadership. The psychologists have illuminated the aspects of rational behavior in decision making, the mechanisms of group influence and behavior, the nature of leadership, and the problems of motivation. Management is not the exclusive bailiwick of the business executive or the public administrator: as will be amply shown in the following chapters, the theory of management necessarily draws upon all the disciplines seeking to understand individual and group action.

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[45] See especially *The Elements of Administration* (New York: Harper & Brothers, 1943) and *Management of Tomorrow* (New York: Harper & Brothers, 1933).

[46] H. C. Metcalf and L. Urwick (eds.), *Dynamic Administration: The Collected Papers of Mary Parker Follett* (New York: Harper & Brothers, 1941).

[47] *The Art of Leadership* (New York: McGraw-Hill Book Company, Inc., 1935).

[48] With L. S. Fish and H. L. Smith, *Top-management Organization and Control* (New York: McGraw-Hill Book Company, Inc., 1951).

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THE FUNCTIONS OF THE MANAGER

The catalogue of managerial functions is by no means standardized. The terminology itself is complex: simply to list the activities managers undertake in their executive capacities would be an extensive task, and to attempt then to analyze each activity would produce further confusion. The scientific approach, on the other hand, would involve, first, the classification of the several items under a few heads. It is here, however, that practices vary, for there is no agreement on the number of groups or on the items to be included in each group.

The procedure adopted here—to formulate the groups according to the general practice of businessmen—has several advantages. It avoids artificial terminology: students and businessmen will not need to learn new and different definitions, and managers in all fields, finding common terms with ordinary meanings, will be encouraged to read more widely about managerial functions. The functions generally found to be most significant include planning, organizing, staffing, direction, and control.

Planning. Planning is the executive function which involves the selection, from among alternatives, of enterprise objectives, policies, procedures, and programs. Since the decisions in planning uniquely affect the enterprise *in the future*, those who plan must have the ability to visualize the enterprise as they wish it to become. Considerable confusion has arisen about who should plan and when planning should occur. Ever since the work of F. W. Taylor, executives have tended to separate planning from performance,[1] a practice that proves unworkable if it means that two managers of equal rank command the same subordinates, thus violating unity of command. If, however, the planning activity is undertaken as an advisory service to the manager in charge of performance, the practice is often highly productive. Planning, in other words, cannot be separated from managerial performance: managers plan whether they are at the top, middle, or bottom of the organization structure.

Another problem concerns the time when planning should be undertaken. On a highly theoretical plane it may be argued that planning logically comes first and that organization, staffing, directing, and control follow. However, such a view assumes that an enterprise is interested in carrying out only one plan; rather, managers find themselves carrying on all their functions without attention to order. Plans beget subordinate plans, require modifications, and new plans are developed while old programs are being accomplished. Thus it appears impractical to consider a special time for the planning function.

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[1] P. E. Holden, L. S. Fish, and H. L. Smith, *Top-management Organization and Control* (New York: McGraw-Hill Book Company, Inc., 1951), Part B, Sec. 3.

Organizing. The organization function of a manager involves the determination and enumeration of the activities required to achieve enterprise purposes, the grouping of these activities, the assignment of them to a subordinate manager and the delegation of authority to carry them out, and provisions to permit the desired type of coordination among managers and subordinates. Sometimes all these factors are included in the single term "organization structure"; sometimes they are referred to as the managerial authority relationships. In any case it is the totality of such activities and authority relationships that comprises the organization function.

There are several implications of this concept of organization. In the first place, the one-man business cannot possibly be organized. Since the owner or operator himself performs the managerial functions of planning and controlling, he delegates no authority to others. Let him, however, split off the buying activities, delegate them to a subordinate and provide coordination of activity between the buyer and himself, and the enterprise will have become organized. An *organized* enterprise requires at least two *managers* on the same level or in a superior-subordinate relationship.

A second implication is that all managers, when they decide to organize an enterprise or a department of any undertaking, proceed in the same way. Whether he be president, sales manager, controller, or office manager, each will group the activities for which he is responsible, delegate them and the requisite authority to subordinates, and provide for the coordination of their work.

The organization structure is, of course, not an end in itself but a tool for accomplishing the enterprise objective. Efficient organization will contribute to the success of the firm, and for this reason the application of organization principles is very important. But striving for a pretty structure, without regard for its use, is futile. The organization must fit the task and must reflect the compromises and limitations imposed on the manager.

Staffing. The function of staffing comprises those activities which are essential in manning, and in keeping manned, the executive positions in an enterprise. Thus, staffing as used in this book always involves managers and never nonmanagers. The phases of the staffing function may be readily visualized. It is necessary to foresee what managerial positions need to be filled, to have on hand a managerial inventory, to know what qualities are essential in a manager, to devise ways and means of discovering these qualities, and to recruit, select, and train candidates.

Direction. The executive function of direction embraces those activities which are related to guiding and supervising subordinates. Although the concept of direction is relatively simple, there is extraordinary complexity in subject matter and methods. It is the duty of the superior manager to inculcate in his subordinates a keen appreciation of the enterprise traditions, history, objectives, and policies. They must learn the organization structure, the interdepartmental relationships of activities and personalities, must become familiar with their duties and the usage of their authority. They must develop the ability to work with, and learn from, others, both superiors and inferiors, and, above all, must themselves become effective leaders.

The methods a superior will employ are, of course, various. The successful direction of subordinates requires a knowledge of alternative means and the intuition to employ the appropriate one at the right time and in the right way. To do this, one needs to be a practical psychologist.

Control. The control function includes those activities which are designed to compel events to conform to plans. This formulation of the concept embraces the idea that the planning activities must precede control and that plans alone are not self-achieving. They must be carried out and possibly modified by circumstance before objectives can be realized.

In the past, control activities have generally related to the measurement of achievement in objective terms. Such control devices as the budget for controllable expense, inspection records, and the record of man-hours lost are familiar to everyone. Each has the characteristic of objective *counting;* each purports to show whether plans are working out. If abnormal deviations persist, correction is indicated. But what is corrected? Persons. Nothing can be done about reducing scrap, buying according to specifications, or sales returns until the personal responsibility for deviations has been determined. Compelling events to conform to plans really means locating the persons responsible for negative deviations from standards and making certain that the necessary steps are taken to ensure improved performance. Thus, control of things is achieved through control of people.

There is a possibility that in the future it may very well be practical to determine directly the personal responsibility of managers for inferior results. The realization of this possibility would greatly simplify the control activities, for those who control would be relieved of the necessity of discovering deviations, determining their causes, and deliberating upon the relative responsibility among the managers involved.

Coordination, the Essence of Managership

The essence of managership is the achievement of coordination among people. Coordination is a complex concept, including principles by which harmonious enterprise activity can be accomplished and the many techniques for achieving the greatest synchronized effort.

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Need for coordination. The necessity for such synchronizing is well known. Programs and policies must be interrelated with respect to both timing and direction. Conflicts in intentions or practices must be avoided.

There is a tendency to obscure a fundamental truth, viz., that coordination is impossible without an acceptance by all personnel of the dominant goal of the enterprise. If, for example, managers are not sure whether the basic goal of their firm is profit, quality of merchandise, the discovery of advanced techniques, or some other goal, it is obviously impossible to coordinate their efforts. Each would be guided by his own ideas of what is in the interest of the firm or, without any such conviction, work for self-aggrandizement. If such splintering efforts are to be avoided, the dominant goal of the enterprise must be clearly defined and "sold" to everyone concerned.

Principles of coordination. Perhaps the most original and constructive thought has been given the concept of coordination by Mary Parker Follett,[2] who has sifted principles from techniques and clarified the conditions for creating synchronized effort.

The principle of direct contact states that coordination must be achieved through interpersonal, horizontal relationships of people in an enterprise. People exchange ideas, ideals, prejudices, and purposes through direct personal communication much more efficiently than by any other method, and, with the understanding gained in this way, they find ways to achieve both common and personal goals. This recognized identity of ultimate interests then tends to bring agreement on methods and actions. For instance, rivalry and consequent criticism, which all too frequently mar the relationships of employees in sales and manufacturing departments, are evidences of poor coordination. The sales people are understandably interested in having products that will suit the customer. On the other hand, production personnel tend to think in terms of permissible tolerances, straight-line manufacturing, and the minimum in variety and design. Unless the personnel of these departments exchange ideas and reach an understanding of the types of control to which each is subject, there can be no coordination between them. No *order* to coordinate can achieve coordination.

A second principle stresses the importance of achieving coordination in the early stages of planning and policy making. It is clear that, *after* departmental plans are put into operation, it becomes more difficult to unify and time them properly. There is the treasurer, for example, who suddenly tightens up credit without first clearing with the sales department, or there is the engineer who specifies tighter tolerances without consulting the production department or waiting until the proper equipment, men, and training can be provided; and the cry, "Why doesn't someone tell me about this?" thus becomes a common refrain in business.

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[2] H. C. Metcalf and L. Urwick (eds.), *Dynamic Administration: The Collected Papers of Mary Parker Follett* (New York: Harper & Brothers, 1941), pp. 297 ff.

The third principle states that all factors in a situation are reciprocally related. When A works with B, for instance, each finds himself influenced by the other, and both are influenced by all persons in the total situation. In all situations, then, people act as a resultant of many environmental forces. The people in the marketing research department are influenced by others in the sales department or by the attitude of those in production or finance. A department that has not entrenched itself is highly sensitive to the criticism of other units, and its planning and practices will be trimmed accordingly.

These principles indicate, finally, that the method of achieving coordination is horizontal rather than vertical. People cooperate as a result of understanding one another's needs, and the line officer's dictum, "Coordinate," is both unrealistic and unenforceable.

The need for continuous interchange of information can, then, hardly be overemphasized. The forces in enterprise never stay put. They are continually being modified by alterations in the external environment and by internal actions and decisions. The achievement of coordination itself modifies the strength of contending forces, often creating new ones and not infrequently deflating the old. The problems of enterprise are never solved. Rather, the issue crumbles before the adjustments of interested personnel: compromises are reached by the interchange of information or the modification of details. When these adjustments are made, the problem disappears because the forces which created it are resolved. New strengths and weaknesses may be uncovered and, in the process of time, may build up again to the stature of a problem—a critical relationship of numerous complex forces. Good coordination will remove the critical points as they arise; excellent coordination will anticipate them and prevent their occurrence.

The techniques of coordination. The most ancient, as well as the most important, device for achieving coordination is the supervisor. His chief duty to his own superior is to see that his subordinates are achieving a high quality of coordinated effort among themselves and in their relationships with other groups. This does not mean that supervisors directly coordinate the work of their subordinates. It does mean that they employ directional devices, teach principles of coördination, illustrate their application, and apply tests to determine the quality of synchronized effort.

Because the span of management limits the number of subordinates that a supervisor can properly direct[3] and because enterprises are of a size which requires the services of several supervisors, the technique of organization is a very important device for achieving coordination. Careful attention to the principles of organization will produce a structure in which the authority and functions of the several divisions will be clearly defined and whose framework will facilitate the interaction essential to the correlation of activity.

Although personal contact is by all odds the most effective means of achieving such coordination, there are many supplementary devices that are also utilized. These include all types of written communications, such as procedures, letters, and bulletins, as well as modern mechanical devices for the transmission of ideas. Since skill in the use of such timesavers is not innate, employees will need to be ~~instructed~~ TRAINED in them until they can express ideas even in the absence of personal contact. They must be taught to understand what knowledge is vital to their superiors and to inform them without loss of time.

Group meetings are effective devices for achieving a high quality of coordination. They represent a deliberate effort on the part of the superior to bring into personal contact the people who are especially concerned with a subject. Their purpose is not to "tell" the members something—for coordination cannot be imposed from the top—but to achieve unity in objective by permitting members to forge policy themselves.

Finally, attention should be given to the device of using liaison men to facilitate coordination. This is by no means an unusual practice. Indeed, there were few firms during World War II that did not have their expediters, and expediting continues as an important activity in most firms. However, the employment of this device on any but a temporary basis is evidence of a poor organization structure, since effective communication is one of the purposes of organization.

Distinguishing the Functions of the Manager

The activities of a manager differ from those of a nonmanager in that the former include responsibility for the quality of synchronized effort achieved by subordinates. What the manager does to accomplish this goal embodies the managerial functions, *i.e.*, deciding upon the grouping of activities and the authority relationships of managers and subordinates in the firm, selecting subordinate managers, guiding and overseeing their activities, developing plans for accomplishing the enterprise objective, and making certain that events conform to these plans.

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[3] For discussion of this point, see Chap. 6.

It is the manager's responsibility, then, to see that coordination exists, even though he cannot order it into reality. The extent to which coordination involves a personal relationship between superior and subordinate, however, is not so certain. One group, emphasizing person-to-person contact, holds that the manager is achieving coordination when he selects the particular subordinate to head a department, directs his activities, and checks on his progress. The more general viewpoint, on the other hand, is that the manager best influences the quality of coordination when he is engaged in all his functions and that, as he delegates authority, assigns duties to subordinate managers, and develops plans, he is influencing the quality of synchronized effort, even though dealing impersonally with many individuals.

Lack of Agreement on the Concept of Functions

During the last fifty years management students have been concerned with the identification and naming of the executive functions. Unfortunately, there has been a significant lack of agreement with respect to those activities which are deemed exclusively managerial in nature, the way in which these several functions should be classified, and the terminology to describe the groups.[4] Writers and businessmen alike have tended to ignore one another in dealing with this subject.

Inquiring into the reasons for the lack of agreement among writers, Tannenbaum has listed eight causes: [5] (1) the complexity of business enterprise; (2) lack of common terminology to describe similar concepts; (3) careless use of words; (4) lack of clarity in describing the manager's functions; (5) inclusion of techniques among the manager's functions; (6) confusion between functions and processes; (7) the description of functions in subjective terms; and (8) confusion of functions with operational activities.[6]

This enumeration may be used as a guide to the basic causes for the lack of agreement. One cause concerns the superficiality of analysis. Writers have too often confused the manager's functions, the techniques he uses, and the processes by which the functions are carried out. The second basic difficulty concerns the careless and inconsistent use of words and the omission or inexactness of definitions. Finally, there has been a failure to use common terms to describe the same concept. Of course, writers are not *required* to use common terms, but scientific progress depends in large measure upon this practice.

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[4] Robert Tannenbaum, "The Manager Concept: A Rational Synthesis," *Journal of Business of the University of Chicago*, vol. 22, no. 4, pp. 229–240 (October, 1949). In this article Professor Tannenbaum compares the subject matter and classification systems of the leading writers.

[5] *Ibid.*, pp. 228–229.

[6] This enumeration is itself subject to certain criticisms. The first reason cited is a pure rationalization unless it means that business enterprise is too complex for earlier writers to understand; and the failure by the author to explore the meaning of the last item leads to the question of its redundancy with the sixth.

The Nature of Managing

At least three groups have an interest in understanding the nature of managing. Those who occupy executive positions obviously need a clear understanding of the subject: a blurred concept frequently results in time lost in nonmanagerial activities to the neglect of executive duties. A second group is that of employed persons who do not manage—laborers, clerks, union representatives, and others. Their interest in this subject is Hydra-headed. Because their goals parallel those of the firm, they want to feel confident that their managers know how to manage, and a favorable evaluation will lead to an important source of support for any superior. If, on the other hand, workers observe that managers "do nothing," the expression reflects a failure to understand that executives get things done by working through others. The third group interested in the subject includes students, teachers, and scholars, who obviously can make no progress in this field if they misunderstand its nature.

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Identification of managerial activities. A function is the natural or characteristic action of a thing. Applied to management, the term "functions" means the activities which managers undertake as managers. Writers who have tried to separate the activities of executives from those of nonmanagers have adopted the technique of observation and comparison—that of eliminating activities common to both managers and nonmanagers and classifying the remainder. Similar results can be obtained by deductive reasoning.

It may be true that managers sometimes engage in activities that are not managerial in nature, *i.e.*, functions performed by nonmanagers. For example, a manager may type his own letters, try his hand at writing advertising copy, sell a house account, write a book, act as staff expert to his superior, or run a drill press at one time or another in the course of a month or year. But these functions are not managerial, since they are not characteristic activities of executives.

If, on the other hand, a man is engaged in guiding subordinates, deciding how to achieve a particular goal, or checking to see that events conform to plans, he is undertaking duties characteristic of managers. *By their works ye shall know them:* differentiating between managers and nonmanagers involves the recognition of their characteristic functions. Although executives may, at their discretion or whim, engage in nonmanagerial activities, those who are not managers *never* undertake executive functions.

Principle of universality of managerial functions. From the foregoing analysis one can see that managers perform the same functions regardless of their place in the organization structure or the type of activity in which they are engaged. When they act in their managerial capacity, presidents, department heads, foremen, supervisors, college deans, bishops, and heads of governmental agencies all do the same thing. Every one is a manager and every one, at some time or other, must carry out all the duties characteristic of managers. This is the principle of the universality of managerial functions.

The implications of this principle are several. In the first place, it means that anything significant that is said about one manager applies to all managers. As a consequence, it is now possible to develop a theory of management applicable to all executives in all occupations.[7] This is a significant forward step, for if the principle failed to hold, writers could report only fragmentarily on managerial activities.

In the second place, the principle implies that managerial knowledge and experience are transferable from department to department and from enterprise to enterprise. Merchandising executives may be shifted to manufacturing; the military commander to peaceful pursuits; foremen from flour milling to warehousing; and production managers to sales. To the extent, however, that their tasks are managerial rather than technical, and with the proper motivation, executives will employ their skill as well in one occupation as in the other.

Functions versus managerial techniques. Further clarification of the nature of managing is achieved by the negative approach of freeing the concept of executive functions from certain adhesions sometimes confused with them. One such adhesion is that of managerial techniques.

A managerial technique is a procedure adopted by an executive in carrying out his functions. For instance, a manager will commonly initiate action by giving a command, but it is entirely conceivable that he may rely upon the older technique of imitation, sometimes performing the necessary action in the presence of the worker, who is thereby persuaded to carry out the duty himself. The activity, however, is a procedure rather than a function.

Functions versus technical skills. The failure to distinguish executive functions from technical skills is a second source of confusion. Technical skills are possessed by experts and acquired through study and practice. They are the attributes of chemist, statistician, physicist, accountant, and engineer. These people are, of course, extraordinarily important to the success of any enterprise, a fact recognized in the often-heard statement that the day of the unspecialized worker is over.

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[7] Compare Urwick's remark in H. R. Light, *The Nature of Management* (London: Sir Isaac Pitman & Sons, Ltd., 1950), p. 10: "Knowledge of a particular branch of business was, and still is in many instances, the sole criterion of competence. It has only recently been recognized that there is a general ability to manage which can be made the subject of a recognized 'discipline' based upon objective research."

It is the function of a specialist to apply his skill to any problem assigned. A lawyer is employed to draw up sales contracts; the physicist, to undertake research in natural science; the accountant, to keep records; the engineer, to design an electronic tube. These activities require skill, but they are by no means managerial in nature. Rather, it is the manager who employs these men because they can contribute to the achievement of the enterprise objective.

He himself, on the other hand, may or may not possess technical skills. In his managerial capacity he certainly is not utilizing such expertness. Nevertheless, in the course of his past experience he normally will have acquired a degree of facility in one or more specialized activities. A district sales manager, for instance, may be troubled by the inability of his office to recruit good salesmen and may spend so much time studying this problem, becoming acquainted with the current literature, and gaining experience in applying old and new selective techniques that eventually he may become a recognized expert. Should he later be appointed general sales manager, he might no longer exercise this skill but would be said to possess an unused skill.

It is a common experience that the middle- and large-scale enterprise employs men with varying kinds of skill. Which skill, however, must the chief executive have? Clearly, since man does not live long enough to acquire many skills, the manager will almost certainly have fewer than will those he is directing. But if he can successfully use the technical skills of others, why must he possess a skill at all? Obviously, he need not. Managers employ skilled technicians but need have no such skill themselves.

Is the possession of technical skill a handicap to managers? Evidence appears to point in both directions. Most businessmen can list a few former accountants, lawyers, engineers, or others who are now corporation presidents, but always the sample is too small to indicate reliably whether experts make better or worse presidents than men with a production or sales background. In American business history there has been a marked tendency for corporations seeking presidents to name production men when their problems were those of production, sales managers when their problems were of distribution, and engineers when their problems concerned research and development. These practices have generally escaped criticism, either because it was not known what the managers were supposed to do or because the selectees developed into good managers after their appointment.

The primary problem of the technically skilled manager is that of the time spent in acquiring and practicing his specialty. Continued application of a skill for ten or twenty years tends to narrow one's outlook. The specialist may neglect to keep up in his own general field or lose sight of the relation of his activities to those of the department or enterprise. What is more, in his capacity as an expert he is given no opportunity to *practice* managing. As managers, such men are poor risks, becoming too often, in F. C. Hooper's characterization, "one-eyed specialists in life-long grooves and niches."[8]

There are, however, two things a manager must know about technical skills. In the first place, it is essential that he know which skills should be employed in his particular enterprise and know enough of their potentiality to ask discerning questions of his technical advisers. For instance, the president of a firm that manufactures a hair restorer may well read about the research on this subject being carried on at Johns Hopkins University. His technical advisers may not know about this development or, as is frequently the case, may not be able to see its commercial application. This independent source of information, however, will permit the president to counsel with his advisers and broaden their activities.

In the second place, a manager must also understand both the role of each skill employed and the interrelationships between skills. The physicist, the chemist, the engineer, and the lawyer may delve into the same kind of problem from different viewpoints. The manager must know what to assign to and expect of each and must know whether all phases of the issue are being studied. He must also determine the relationship of the work of each technician to that of the others and to all other phases of the enterprise process and must compose harmonious answers to such questions as those of the number of specialists in each activity, the ratio of their progress to budget, and their individual and group effect upon the product, its quality, price, and market.

It is the necessity for this familiarity with the possibilities of each pertinent skill that explains why new general managers are not expected to make important decisions from the moment they are appointed. They are expected to spend considerable time in the study of the enterprise purpose, its policies and practices, its position in the industry, and its strong and weak points—each of which necessarily involves a broad acquaintance with technical skills.

In addition, it is readily admitted that most managers, particularly at lower levels in the typical organization, have technical as well as managerial functions. The director of purchasing is likely to be also the president's chief adviser on procurement policy. The head of the market research department will probably serve as the company's principal technical expert in this area. But in all such cases, the distinction must be drawn between that portion of a person's job which is managerial and that which is technical. Only the latter part depends upon competence as a technical expert.

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[8] F. C. Hooper, *Management Survey* (London: Sir Isaac Pitman & Sons, Ltd., 1948), p. 150.

Furthermore, technical competence often gives a person a position of prominence and respect in a group, thereby aiding his leadership. Such technical mastery, however, while helpful in managing a group of subordinates, is not itself a function of managership.

Material resources versus human resources. A final source of confusion for some writers and students of management theory has been the attempt to utilize the economists' classification of the productive factors as a basis for describing the functions of managers.[9] Such a procedure inevitably involves them in a discussion of the management of material as well as human resources.

The extent of the error involved in such an analysis may be appreciated when it is pointed out that managers achieve enterprise objectives through people. Thus, *people* are the subject of managership, not land, buildings, or raw materials. The president of a department store does not buy goods for resale, wrap and pack, arrange for a truck to deliver merchandise, or contract for advertising space. But he makes certain that these things are done by looking to his merchandise manager, publicity manager, building superintendent, and controller to carry them out.

Similarly, while the fully occupied manager does not buy, sell, or collect, he is fully concerned with the men who report to him, making certain that they understand the purposes of the firm, that they act in concert, and that what they do is coordinated in terms of time, place, and budget. Consequently, managers, as managers, are always concerned with the human resources through whom the welfare of the enterprise is accomplished.

Selected References

Beishline, J. R., *Military Management for National Defense*, Chap. 3. New York: Prentice-Hall, Inc., 1950.

Fayol, H., *General and Industrial Management*, Chap. 5. New York: Pitman Publishing Corporation, 1949.

Goetz, B. E., *Management Planning and Control*, Chap. 2. New York: McGraw-Hill Book Company, Inc., 1949.

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[9] See W. H. Newman, *Business Policies and Management* (2d ed.; Cincinnati: South-Western Publishing Company, 1949), Part IV; and R. T. Livingston, *The Engineering of Organization and Management* (New York: McGraw-Hill Book Company, Inc., 1949), Chap. 2.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control,* Part A. New York: McGraw-Hill Book Company, Inc., 1951.

Hooper, F. C., *Management Survey,* Chap. 1. London: Sir Isaac Pitman & Sons, Ltd., 1948.

Tannenbaum, R., "The Manager Concept: A Rational Synthesis," *Journal of Business of the University of Chicago,* vol. 22, no. 4, pp. 229–240 (October, 1949).

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AUTHORITY AND RESPONSIBILITY

Authority is the key to the managerial job. While managers exercise the basic function of getting things done through others by means of planning, organizing, staffing, directing, and controlling, their position is made real by their possession of authority.[1] As will be seen later in the discussion of organization, authority—the right by which superiors are able to require conformity of subordinates to decisions—is the basis for responsibility and the force that binds organization together. The process of organizing encompasses grouping of activities for purposes of management and specification of authority relationships between superiors and subordinates and horizontally between managers. Consequently, authority and responsibility relationships come into being in all associative undertakings where the superior-subordinate link exists. It is these relationships that create the basic character of the managerial job.

The Meaning of Authority

PRIVATE PROPERTY

While the term "authority" is occasionally given various meanings by management scholars, the standard definition is "legal or rightful power; a right to command or to act." Authority is thus power over others and, as applied to the managerial job, the power to command others to undertake, or not to undertake, activities deemed by its possessor to be appropriate for the realization of enterprise or departmental purpose.

As Mooney has stated, "Coordination is the all-inclusive principle of organization" and finds its foundation in authority, "the supreme coordinating power." [2] According to Mooney, this power must lie somewhere in organization if consistency in internal objectives is to be realized.

Since enterprise managers must work through people to get things done, management theory is necessarily concerned with a complex of superior-subordinate relationships and is therefore founded on the concept of authority. Vested in the manager of a company, division, department, branch, or section is power sufficient to force compliance, whether through persuasion, coercion, economic or social sanctions, or other means.

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[1] As Tannenbaum has said, "Managers are those who use formal authority to organize, direct, and control responsible subordinates (and therefore, indirectly, the groups or complexes which they may head) in order that all service contributions be coordinated in the attainment of an enterprise purpose." "The Manager Concept: A Rational Synthesis," *Journal of Business of the University of Chicago*, vol. 22, no. 4, p. 240.

[2] J. D. Mooney, *The Principles of Organization* (rev. ed.; New York: Harper & Brothers, 1947), pp. 6–7.

Despite the importance of authority, managers tend—perhaps because of its connotations of power—to avoid using the word. Thus, subordinates are spoken of as having responsibility delegated to them, even though it is authority, rather than responsibility, that is delegated. For, as will be seen later, the essence of responsibility is obligation, the obligation to use authority to perform duties. Similarly, one hears of managers being assigned responsibilities, when what is meant is that the manager is assigned tasks, or duties, or things to do. The semantics of these misused terms may be clarified by noting that managers have authority (power or the right to command) *delegated* to them, responsibility *exacted* from them, and duties (or tasks) *assigned* to them.

The Source of Authority in Management

Far more difficult to understand than the nature of authority and productive of far greater disagreement among management scholars is the question of its source. Two viewpoints have developed concerning the source of authority; one may be called the formal authority theory, and the other the acceptance theory of authority.

The formal authority theory. Until recently, it rarely occurred to writers on the theory of management that there could be any argument about the source of a manager's authority. One had only to trace authority delegations upward from any managerial position. Thus, the supervisor of cash control obtained his authority from the assistant treasurer, who obtained his from the treasurer, who in turn got his from the president of the company, whose authority was delegated by the board of directors, who obtained theirs from the stockholders, who held theirs by virtue of the institution of private property as modified by incorporation and other laws. Thus the ultimate source of authority rested principally in the institution of private property—a complex of rights, laws, codes, mores, and folkways vesting in a person power over material resources. Naturally, this authority arises from other social institutions, for the manager, as well as the stockholder, finds himself limited by laws, by political and ethical considerations, and by such economic institutions as competition, credit, banking, and labor unions. But social institutions—whether political, economic, religious, or educational—define the bounds and content of private property and, in so doing, define the authority of the person who has the property rights.

Most formal authority theorists emphasize the legal aspects of private property, though good sociological analysis would broaden the source of authority to include all related social institutions.[3] Indeed, private property itself is a social institution, deriving its characteristics from group behavior, objectives and habits of thinking and acting. As Petersen and Plowman have stated: [4]

> Under our democratic form of government the right upon which managerial authority is based has its source in the Constitution of the United States through the guaranty of private property. Since the Constitution is the creature of the people, subject to amendment and modification by the will of the people, it follows that society, through government, is the source from which authority flows to ownership and thence to management.

Just as the institution of private property is defined and sometimes circumscribed by other social institutions, authority may be derived from institutions other than private property. Governmental controls, whether in the form of direct regulations or such indirect controls as fiscal policies, constitute an institutional framework that gives meaning and substance to the authority of corporate executives. Moreover, in political or religious organizations, the authority of managers (whether governors or bishops) originates from such social institutions as the democratic process, the federal system of government, or the various controls of church doctrine and organization. The origin of authority, then, whether in economic institutions or in social groups where private property is nonexistent, may be traced to the elements of institution—the basic folkways and mores of the group. As these elements change, the institution must change. One has only to look at the recently changing nature of private property to see how the institution responds to the desires, objectives, and practices of the group.

The concept of authority as being power transmitted from basic social institutions to individual managers has been called formal authority.[5] In the case of the private business enterprise, this authority is looked upon as hierarchical, originating from the top in the institution of private property and being delegated through owners to their representatives, the managers, and from them to their subordinates.

The acceptance theory of authority. Fairly wide support has been given recently to the notion that the real source of authority of the manager is the acceptance by his subordinates of the power he holds over them. It is a theory that can be traced directly from the syndicalists through Laski to the American business executive, Chester I. Barnard, and his followers.[6] The viewpoint of Barnard is perhaps best expressed by his definition of authority: [7]

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[3] Note that "institutions," as here used in the sociological sense, means a complex of laws, codes, mores, and folkways by which a social group attains and enforces group purpose.

[4] E. Petersen and E. G. Plowman, *Business Organization and Management* (Homewood, Ill.: Richard D. Irwin, Inc., 1949), p. 62.

[5] C. I. Barnard, *The Functions of the Executive* (Cambridge, Mass.: Harvard University Press, 1938), pp. 162 ff. See also Tannenbaum, *op. cit.*, p. 235.

> . . . the character of a communication (order) in a formal organization by virtue of which it is accepted by a contributor to or "member" of the organization as governing the action he contributes; that is, as governing or determining what he does or is not to do so far as the organization is concerned. According to this definition, authority involves two aspects: first, the subjective, the personal, the accepting of a communication as authoritative . . . ; and, second, the objective aspect—the character in the communication by virtue of which it is accepted.

Tannenbaum defines authority similarly. He states [8] that authority

> . . . describes an interpersonal relationship in which one individual, the subordinate, accepts a decision made by another individual, the superior, permitting that decision directly to affect his behavior.

Thus, the key factor in the acceptance theory is that managers have no real authority unless and until the individual subordinates confer this upon him. The individual, as Tannenbaum points out, "always has an opportunity, with respect to a decision made by another directly to affect his behavior, to accept or reject that decision," and the sphere of authority possessed by a superior is "defined for him by the sphere of acceptance of his subordinates."

From this concept, Tannenbaum develops an interesting rule governing the individual's acceptance of authority: [9]

> An individual will accept an exercise of authority if the advantages accruing to him from *accepting* plus the disadvantages accruing to him from *not accepting* exceed the advantages accruing to him from *not accepting* plus the disadvantages accruing to him from *accepting;* and, conversely, he will not accept an exercise of authority if the latter factors exceed the former.

The advantages of a subordinate's accepting an exercise of authority are, according to Tannenbaum, (1) contribution to the attainment of enterprise purpose regarded by the subordinate as good, (2) approbation of fellow workers, (3) rewards from the superior, (4) action in accordance with the subordinate's own moral standards, (5) avoidance of the necessity for accepting responsibility, and (6) response to qualities of leadership of the superior. Disadvantages of refusal to accept, besides the loss of advantages outlined, include social disapproval, expulsion from a group, formal disciplinary action, exertion of economic pressures, torture, imprisonment, or even taking of the subordinate's life. These, when reversed, give the key to advantages of not accepting plus the disadvantages from accepting.

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[6] See Tannenbaum, *loc. cit.*, and his "Managerial Decision-making," *Journal of Business of the University of Chicago*, vol. 23, pp. 22–39 (January, 1950). See also H. A. Simon, *Administrative Behavior* (New York: The Macmillan Company, 1950), Chap. 7; also K. D. Beene, *A Conception of Authority* (New York: Columbia University Press, 1943).

[7] Barnard, *op. cit.*, p. 163.

[8] Tannenbaum, "Managerial Decision-making," p. 27.

[9] *Ibid.*

It should be emphasized that acceptance of authority here differs materially from that found in the formal theory of authority. In the formal theory, where the source of authority is seen as institutional, acceptance of the institution is by the social group—in the case of private property or democratic government, by an extremely large group. Moreover, the growth of social institutions goes beyond mere acceptance. Since they come into being because they support group purpose, the group does more than accept them but establishes them, as well. The acceptance theorists, on the other hand, conceive of acceptance only in terms of the manager's direct subordinates.

Other sources of authority. In addition to the formal and acceptance theories of the source of authority, although perhaps more closely related to the latter, is the belief that authority may come from personal qualities or from technical competence.[10] One has only to recall in this connection individuals who have made, in effect, subordinates of others through the sheer force of personality. Similarly, the brilliant engineer or economist may exert considerable influence in a firm by being able to furnish answers or sound advice. He may have no actual authority; yet his advice may be so eagerly sought and so unerringly followed that it appears to carry the weight of a decision.

The source of authority: some conclusions.[11] It is difficult to adopt the acceptance theorists' hedonistic formula for the source of managerial authority. The very fact that some of the most important advantages of accepting and disadvantages of not accepting authority arise from the manager's power to grant or withhold rewards or to remove the subordinate from his group makes the acceptance theory seem unreal. The soldier who "accepts" his commander's orders because the alternative is the guardhouse or the firing squad has a strange kind of acceptance, indeed, and the acceptance is no more genuine where a subordinate's alternative is to quit his job or be fired.

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[10] L. F. Urwick, *The Elements of Administration* (New York: Harper & Brothers, 1943). In a discussion on p. 42, Urwick speaks of "formal" authority as being "conferred by organization," of "technical" authority as being "implicit in special knowledge or skill," and of "personal" authority as being "conferred by seniority or popularity."

[11] For an extended analysis of this problem, see Cyril O'Donnell, "The Source of Managerial Authority," *Political Science Quarterly*, vol. 47, pp. 573–588 (December, 1952).

Moreover, the implications of the theory are serious for the continuation of order in organization. If acceptance were the source of authority, the manager would, strictly speaking, be put into a position of not knowing from one command to another whether he would be obeyed, for until he is obeyed, he would have no authority to command. Furthermore, if subordinates confer authority, as the manager's exclusive source of power, they must also confer his power to levy sanctions.

The basic error of the acceptance theorists consists not only in conceiving authority without sanctions but also in assuming that authority rests with *individual* subordinates and overlooking, therefore, the powerful effect of social institutions. But the mores of the larger group confer powers that supersede individual desires. The authority of ownership involved in the institution of private property, for example, carries with it the right to contract for services or to grant or withhold remuneration, except, of course, as this right has been circumscribed by such other institutional developments as labor unions and labor legislation. Thus management is given an authority transcending the desires of any individual departmental subordinate.

Order in organized behavior cannot be achieved without authority, since this is the force that unifies the social group. The alternative, as Malinowski has pointed out, is chaos: "Submission to laws as well as the power to enforce laws and rules are indispensable in human behavior." [12]

At the same time, it must be admitted that formal authority tends, without leadership, to be a mere abstraction. It is not enough that a manager be appointed by an owner or his representative or that he have power because of his organizational position. His real influence will grow with his ability to elicit support from his subordinates through his personal qualities or his technical competence. But these are qualities of leadership.

One cannot discount the importance of formal authority with its institutional foundations. Buttressed by those qualities of leadership that constitute the key factor in the acceptance theory, formal authority remains the basic source that makes the managerial job what it is. Once possessed, such authority may be delegated or withheld, used or misused, and may be equally effective in capable hands or ineffective in the hands of the inept manager.

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[12] Bronisław Malinowski, *Freedom and Civilization* (New York: Roy Publishers, 1944), p. 27. Ranyard West, in speaking of the organization of primitive organizations, has observed that "the prime requisite and firm creator of any community life is a law of order maintained by force." See his *Conscience and Society* (London: Methuen & Co., Ltd., 1942), p. 240.

THE LIMITS OF AUTHORITY

The institutional foundation of authority necessarily implies that this power is not absolute but that it, like private property and contract, changes with shifts in the ~~mores~~ and folkways of the group and must therefore bend to their influence. Within a business enterprise, the exerciser of authority must ever keep in mind that his effective power is limited by the mores of those over whom it is exerted.. A minority racial group, for example, or a small-town group will each react to authority in its own individual way. Likewise, the managerial subordinates and the nonmanagerial employees of a highly organized company may react differently from a group of stockholding subordinates. These, then, are social limitations on the exercise of authority, although many more specific limitations could be outlined, some of them external to the enterprise, and others internal.

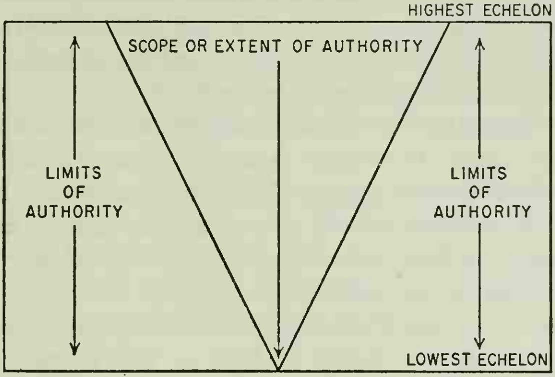

Fig. 1. Limits of authority at various echelons of an organization structure.

It should be pointed out also that the generality of the right to command decreases as one proceeds from the highest to the lowest echelon of an organization structure. This feature is illustrated in Figure 1. One may visualize this characteristic of authority as an inverted pyramid, with the manager at its bottom point. His right to command is severely restricted in every direction. But as one follows the chain of command to the top of the organization structure, the limitations on the authority of the executives at each level gradually recede.

Tannenbaum has pointed out important constraints upon authority.[13] He speaks of biological constraints, the limitations placed on authority by the fact that a given human being does not have the capacity to do something. One can hardly, for instance, order a person to walk up the side of a building. Other limitations are physical: limitations of climate, geography, physical laws, and the chemical elements. Thus, an order to make gold from copper would be a futile one. In addition, Tannenbaum finds technological constraints, those limitations determined by the state of the arts. A decision to place an atomic-powered engine in a racing car could not be made, at least until the arts had advanced to make this possible. Finally, there are numerous economic limitations on the power of a manager. Competitive forces, prices and service levels determined by the market, and ownership by a rival of an advantageous resource or location are examples. Most of these grow out of the combination of scarce resources and competitive behavior, since the behavior of markets and competitors is only to a very limited degree, depending of course on the intensity of competition and the scarcity of resources, subject to an individual manager's authority.

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[13] Tannenbaum, "Managerial Decision-making," p. 32.

There are many other diverse and complex limitations upon executive authority. The power to change enterprise objectives and methods is frequently hedged about in partnership agreements and in articles of incorporation. The statutes reserve to stockholders certain broad powers; bylaws frequently delimit authority, as in the case where the power to employ an auditor is reserved to the board of directors; and policies, procedures, and programs further spell out broad guides to action. Obviously, every manager, whether of high or low degree, must respect such restrictions upon his right to command. Such restrictions, moreover, affect all managers alike: neither the president nor a supervisor is ever free to ignore a procedure, violate a policy, or modify a program. Changes can be made, of course, but not at the whim of any individual.

Each manager, in addition, is subject to specific limitations, ordinarily found in the delegation of authority and assignment of duties. A sales manager may, for instance, find his power to make capital expenditures limited to $1,000, his power to adjust wages and salaries limited to $400 per month, and his power to discharge an employee forbidden entirely. The advertising manager, his subordinate, may be restricted to capital expenditures of $200 and salary adjustments of $225 per month. The incidence of restriction thus grows more oppressive with each degree of managerial subordination.

Responsibility

Responsibility is one of the most misunderstood terms in the literature of management. It is common to hear and read about "delegating responsibilities," "holding a person responsible," "discharging responsibility," and "carrying out a responsibility." Responsibility is variously used to mean duty, activity, or, as has already been noted, authority.

The meaning of responsibility. Viewed internally with respect to the enterprise, responsibility may be defined as the obligation of a subordinate, to whom a superior has assigned a duty, to perform the service required. The essence of responsibility is, then, *obligation.* It has no meaning except as it is applied to a person. A building, a machine, or an animal cannot be held responsible.

Responsibility thus arises from the superior-subordinate relationship, from the fact that someone (in the case under discussion, a manager) has the authority to require specified services from another person. This authority in business enterprise normally results from a contractual arrangement by which the subordinate agrees to perform such services, and perhaps use delegated authority in so doing, in return for monetary or other rewards. Thus authority flows from the superior to the subordinate manager when an assignment of duties is made, and responsibility is the obligation exacted from the subordinate for the accomplishment of these duties.

Responsibility may be a continuing obligation, or it may be discharged by a single action and not arise again. The relationship between a president and his sales manager is typical of the continuing type of obligation. On the other hand, the president may hire, for an organization study, a consulting management engineer, whose obligation will cease when the assignment is completed.

A problem in responsibility sometimes arises in cases where informal leadership appears. For example, a sales manager may have as subordinates an advertising manager, a sales promotion manager, and three district sales managers. For many reasons, among them perhaps the powerful position of the production manager, some of the sales manager's subordinates may look to the production manager for guidance. In this way informal relationships may be established that would have the effect of reducing the influence and power of the sales manager over his subordinates. Unless this shift in alliance is made with the approval of the president or the sales manager and thus constitutes a change in the organization structure itself, the basic responsibility relationships would not be changed. The president would still hold the sales manager responsible for his performance, and the subordinates would still be responsible to the sales manager.

Delegation of responsibility. Responsibility cannot be delegated. While a manager may delegate to a subordinate authority to accomplish a service and the subordinate in turn delegate a portion of the authority received, none of these superiors delegates any of his responsibility. Responsibility, being an obligation to perform, is owed to one's superior, and no subordinate reduces his responsibility by assigning the duty to another. Authority may be *delegated*, but responsibility is *created* by the subordinate's acceptance of his assignment.

No manager, then, can shift responsibility to his subordinates. The president employed by the board of directors cannot avoid total responsibility for the conduct of the enterprise operations. Employees may be derelict in their duties, enrage customers, or carry on warfare with a trade union. For these things and for all other actions of anyone in the firm, the president must answer to the board. He cannot claim to have delegated the responsibility to a production manager, who may, indeed, have caused the trouble.

This inability to delegate responsibility may be seen in an event at a large, rapidly expanding company developing a careful financial plan, where a simple arithmetic error made by a clerk in a financial forecasting unit so seriously affected the projection of cash needs that it would, if it had not been discovered, have caused considerable embarrassment. The error was disclosed at the meeting of the board finance committee with the group of bankers arranging the loan. The finance vice-president who had presented the forecast could hardly waive responsibility for the error by saying that a clerk in a unit of the planning section of the assistant treasurer's office in the treasurer's department was responsible. The finance vice-president was responsible to the board for the mistake, the treasurer was responsible to the vice-president, the assistant treasurer to the treasurer, the planning section chief to the assistant treasurer, the forecast unit head to the planning chief, and the clerk to the forecast unit head. Although authority had been delegated and duties assigned at each level, no one was relieved of his responsibility.

Accountability. A few writers in the field of management have developed, in addition to that of responsibility, the concept of accountability.[14] They think of it as the liability for the proper discharge of duties by the subordinate. There is also a widely accepted use of the term in military organization to indicate the duty of an officer to keep accurate records in safeguarding public property and funds.

In the former definition accountability means responsibility. And since the latter term has much wider currency in the literature of management, it will be employed here exclusively. The term "accountability" may have usefulness in military organizations, but it clearly has strong overtones of a control technique. As such it will be covered in the later discussion of this subject.

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[14] R. C. Davis, *The Fundamentals of Top Management* (New York: Harper & Brothers, 1951), pp. 320 ff.; Petersen and Plowman, *op. cit.*, pp. 72–74; and J. R. Beishline, *Military Management and National Defense* (New York: Prentice-Hall, Inc., 1950), pp. 135–136.

DELEGATION OF AUTHORITY

Just as authority is the key to the manager's job, delegation of authority is the key to organization. Without such delegation, organization could not exist, for there could be only one manager and consequently only a one-department enterprise. Organization, however, depends upon the establishment of departments, and these require the delegation of authority to those who manage them. Thus the subdivision of duties also involves the subdivision and delegation of authority so that these duties may be accomplished.

The purpose of delegation. The primary purpose of delegation of authority is to make organization possible and to make it effective in accomplishing enterprise objectives and efficient in attaining them with the least cost of time and materials. Thus delegation—the vesting of a subordinate with a portion of his superior's authority—has as its principal purpose the creation of managerial jobs. Proliferation of managers becomes necessary when a single executive has more subordinates than he can effectively manage.[15] Unless authority could be delegated, duties requiring coordination could not be effectively assigned to a subordinate manager, since he must have adequate authority over those who look to him for management.

How authority is delegated. Delegations of authority may be specific or general, written or unwritten. It is essential, however, that they be accompanied by some kind of assignment of duties. A manager cannot be given authority unless he knows over what and for what he has power. If the authority delegation, on the other hand, is general or unclear, his understanding of his duties will be inadequate. The job assignment of a company treasurer may, therefore, detail such functions as accounting, credit control, cash control, financing, export-license handling, and preparation of financial statistics, and even these broad categories may be broken down into more definite duties. Or a treasurer may be hired and told merely that he is expected to do those things which persons in this position generally do.

Clarity of delegation. Written and specific delegations of authority are extremely helpful to the manager who receives them. They are perhaps even more helpful to the delegant, for if an executive who delegates authority is required to make his assignments definite, he will the more easily see conflicts or overlaps with other positions and better understand those things for which he can and should hold a subordinate responsible.

Such delegations remove, therefore, much uncertainty. The writers know of a top executive who claims that he never delegates authority but merely tells his subordinate managers to take charge of a department or a plant and then holds them responsible for doing so. In this particular case, the executive is actually making an extremely broad delegation of authority—that of full power to operate the plant as the subordinate sees fit. However, in too many cases where such nonspecific delegations are made, the subordinate is forced to feel his way and, by testing through practice what the superior will stand, define his authority delegation by trial and error. Unless the subordinate is well versed in top company policies and traditions, knows the personality of his boss, and exercises careful judgment, he may be placed at a disadvantage. An executive will do well to balance the costs of uncertainty and the dangers of empire building against the trouble involved in making authority delegations specific.

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[15] See Chap. 6.

On the other hand, there are those who will argue that, especially in the upper levels of management, it is too difficult to make authority delegations specific and that the good subordinate, robbed of inflexibility, will not be allowed to develop in the best way. It is possible, particularly for new top jobs in an enterprise, that authority delegations, at least at the outset, cannot be very specific. If a large company establishes for the first time a traffic manager to coordinate transportation activities at its various plants, the president may well be unclear about the amount of authority that needs to be delegated. But this situation should be remedied as soon as possible. One of the first duties of the new appointee should be the description of the job and clearance of the description with his superior and ideally with those other managers on the same level whose cooperation is necessary for successful operation. There are too many dangers to do otherwise. Organizational frictions, lost time through unnecessary meetings and negotiations, jealousies, stepped-on toes, and other numerous evidences of organizational inefficiency and ineffectiveness are among the costs of vague authority relationships. Too many top executives believe they have a happy team of subordinates who do not need to have specific authority delegations when in fact they have a dissident group of frustrated subordinate managers.

The fear that specific delegations will result in organizational inflexibility is best met by developing a tradition of organizational flexibility. It is true that, if authority delegations are specific, a manager may tend to regard his job as a staked claim with a high fence around it. But this "hatching hen" complex can be eliminated by the proper example of leaders and by making necessary changes in organization structure an accepted and expected thing. Much of the inflexibility of definite delegations comes from managerial laziness and the failure to reorganize as often as necessary for the efficient accomplishment of objectives.

Shared authority. There are some situations in which a responsible manager deliberately insists that power over given situations be shared by subordinates. In manufacturing enterprises, the president may divide among several managers the authority to determine the items in the product line, their design, quality requirements, and price for the specific purpose of forcing the manufacturing, sales, and finance vice-presidents to work together in solving these problems. Even though the president may retain the authority to make final decisions and in this sense be said not to have delegated authority at all, he may yet be hoping for a group decision.

Another example of shared authority is found in the gradual withdrawal of the power of a foreman to discharge or change the pay rate of an employee. This authority is increasingly being shared with the labor leader and the personnel director. Similarly, formal grievance procedure involves shared authority in the handling of certain types of disputes. The tax collector and the renegotiation board, as well as many other regulatory agencies, also share many of the powers that have traditionally belonged to management.

Splintered authority. Shared authority is really an aspect of splintered authority. The latter, however, exists wherever a problem cannot be solved or a decision made without pooling authority delegations of two or more managers. Thus, if the superintendent of plant A sees an opportunity to reduce his costs by suggesting a minor modification in procedures in plant B, he has a decision to make which requires more than his delegated authority. But if the superintendents of the two plants can agree upon the change and if it affects no other coordinate or superior manager in the company, all they need to do is pool their authority and make the decision. Individually their authority is said to be "splintered." In the day-to-day operations of any company, there are many cases of splintered authority, and most of the conferences held by managers are probably due to the necessity of pooling enough authority to make a needed decision.

Actually, as can readily be seen, such problems can be handled by merely shifting the decision making upward until one person can make the decision. In the case of the two plant superintendents, this would lie in the authority competence of the vice-president in charge of manufacturing. However, in many cases, the splinters of authority, while far down in the organization, exist in departments which have their common superior only in the office of the president. For example, one of the writers had a problem involving a large Western railroad with headquarters in Chicago. The problem was relatively minor, but a decision on it in Los Angeles required the consolidated authority of the traffic department, the operating department, and the public relations department. It could have been referred up the line by each of the subordinates to where, in the president's office, sufficient authority would lie for making the decision. But if such decisions were always to be handled by upward reference, the president's office would obviously be swamped. What happened in this case was that subordinates in the Los Angeles office of the three departments met briefly, pooled their delegated authority, and quickly made the decision.

Splintered authority cannot be avoided in organization, especially for unusual problems. However, should there be many instances of recurring decisions on the same matters, it may be evidence that the authority delegations have not been properly made, and that some reorganization is required.

Principle of parity of authority and responsibility. Since authority is the power of a manager to undertake assigned duties, and responsibility his obligation to use authority to accomplish these tasks, it logically follows that the authority and responsibility of a certain manager should correspond. The parity between them is not a mathematical equality; they are, rather, coextensive because they relate to the same group of services.

In the case of the manager the activities to be performed are assigned and his authority to undertake them is delegated by his superior. The president of a firm may, for example, delegate duties to his manufacturing vice-president, together with such powers as that of buying raw materials and machine tools and hiring subordinates. Without this power, the vice-president would be unable to perform his duties and could hardly be held responsible for them. Nor should he, on the other hand, have power to accomplish more than the assigned tasks.

There are many instances where managers try to hold subordinates responsible for duties for which they do not have requisite authority. This is, of course, unfair, and no manager should expect his subordinate to undertake a task under such conditions. Likewise, sufficient authority is sometimes delegated, and the delegatee is not held responsible for the proper use of it. This, however, is obviously a case of poor managerial direction and control and has no bearing upon the truth of the principle of parity.

In discussing the coextensiveness of authority and responsibility, one must remember the nature of authority. Managers are sometimes said to be given authority to do that for which they cannot be held responsible: thus, a sales manager is given authority to sell a company's goods but has no power to make people buy.

The answer to this apparent difficulty is that the sales manager's authority is to use certain material and human resources in order to secure sales wherever possible. He can be delegated no authority to compel people to buy, for that authority was not possessed by the delegant. Therefore, he can logically be held responsible only for using his best efforts and, as an executive, managing the sales force in the best possible way.[16]

one person

Principle of unity of command. In discussing delegation of authority, it has been assumed that, except for cases of shared authority and the inevitable instances of splintered authority, the delegation of power over a particular activity will flow from a single superior to a single subordinate. While it is possible for a subordinate to be delegated authority by two or more superiors and logically possible to be held responsible by them, the practical difficulties in serving two or more masters are obvious. The owing of an obligation is an essentially personal thing, and the delegation of power by more than one person is likely to result in conflicts in both authority and responsibility. Moreover, unless a manager has the total authority to hold his subordinate responsible, his position tends to be undermined.

The principle of unity of command is a practical one in the clarification and effective operation of authority-responsibility relationships, implying as it does the cohesive nature of duties. A president, for example, does not normally divide sales activities among sales, manufacturing, public relations, finance, accounting, and personnel, with no one person responsible for them. Instead, since they are a cohesive unit, he assigns all these duties to the sales manager. Similarly, it is undesirable to have several managers assigning duties to one employee, an action that divides responsibility because obligations are then owed to each of the several managers.

It is desirable, furthermore, to have a single rather than a plural executive to whom the subordinate is responsible. Unity of command would not exist if, instead of a single sales manager, the president had appointed an executive committee to run the department. To force every major subordinate in the sales department to owe his full obligation to each committee member rather than to one manager would be to produce confusion, buck passing, and inefficiency in the operation of the enterprise.

Recovery of delegated authority. All delegations of authority are subject to recovery by the grantor. It is a characteristic of authority that the original possessor does not permanently dispossess himself of this power by delegating it. To do so would be to change the basic nature of authority from which the delegation is made. Just as, in the political area, the right of Americans to change or revoke the Constitution and thus redistribute power is unchallenged, so, in the area of enterprise operation, is the recentralization of authority an unquestioned right of the manager. Delegated authority is frequently recovered when the need arises to modify enterprise and departmental objectives, policies and programs of the firm, organizational structure, and the duty assignments of personnel.

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[16] For a discussion of this point, see L. Urwick, *Notes on the Theory of Organization* (New York: American Management Association, 1952). Urwick quotes C. I. Barnard as one of those who challenge the principle of parity of authority and responsibility on the ground that individuals are often placed in a position where they have responsibility but cannot have authority.

It will be recognized that reorganization inevitably involves recovery and redelegation of authority. A shuffle in organization structure means that power is recovered by the responsible head of the firm or a department and then redelegated to the managers of new or modified departments, so that the head of a new department may receive authority formerly used by other managers and the latter be shorn of many of their former powers. For example, when a reorganization takes quality control away from the works manager and assigns it to a new executive reporting to the vice-president in charge of manufacturing, it is clear that the latter has recovered some of the authority formerly delegated to the works manager and has redelegated it to the manager of quality control. The superior manager, on the other hand, may recover all the formerly delegated authority and then redelegate only part of it, or he may delegate more power to the new man than was exercised by his predecessor.

Centralization and decentralization of authority. Authority delegations from a superior to a subordinate may be made in large or small degree. The tendency to delegate much authority through the echelons of an organization structure is referred to as decentralization of authority. On the other hand, authority is said to be centralized wherever a manager tends not to delegate authority to his subordinates.

It should be noted that these are *tendencies* and not absolutes. Authority is, of course, completely centralized when a manager delegates none, and it is possible to think of the reverse situation—an infinite delegation of authority in which no manager retains any authority other than the implicit power to recover delegated authority. But this kind of delegation is obviously impracticable, since, at some point in the organization structure, delegations must stop. To pick the exact point at which tendencies for centralization end and tendencies for decentralization begin is impossible. Clearly, wherever authority is delegated, some decentralization exists, but one would not speak of the organization as being decentralized unless the delegation were extensive.

A president who delegates little or no authority not only limits the number of managers in his organization but also severely limits its efficient size, since departmentation requires authority delegations and since the size of a group an executive can effectively manage is limited. On the other hand, extensive delegation of authority makes possible expansion in the efficient size of the enterprise. The number of subordinates reporting to a single executive is accordingly reduced to manageable proportions, and positions that do not require too much ability are created. In other words, authority for given tasks is limited to that for which an individual may properly be held responsible.

AUTHORITY AND LEADERSHIP

As was pointed out earlier in the discussion of the acceptance theory, authority without leadership tends to be an abstraction. In fact, the importance of leadership to an effective exercise of authority is so great that those scholars embracing the acceptance theory appear to have confused leadership with authority. The purpose of authority delegations is to create a key tool of managership, so that the power to command may be used for efficiently harnessing the energies, intelligence, and loyalties of people. If the possessor of authority also has the qualities of leadership, he will manage more effectively. Power tends, however, to remain unused if placed in the hands of a person in whom the subordinate does not see the best available opportunity to maximize his own satisfactions.

SELECTED REFERENCES

Barnard, C. I., *The Functions of the Executive,* Chap. 12. Cambridge, Mass.: Harvard University Press, 1938.

Beene, K. D., *A Conception of Authority.* New York: Columbia University Press, 1943.

O'Donnell, C., "The Source of Managerial Authority," *Political Science Quarterly,* vol. 67, no. 4 (December, 1952).

Tannenbaum, R., "Managerial Decision-making," *Journal of Business of the University of Chicago,* vol. 23, no. 1 (January, 1950).

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LEADERSHIP

Since enterprise management is concerned with achieving an objective or objectives through the coordinated effort of a group of persons, it is clear that groups must be led and that it is the manager who must lead. Coercion, frequently applied as a means of obtaining coordination, is now recognized as the least efficient way of getting things done. True leadership implies a willingness on the part of members of a group to follow, to permit themselves to be guided by persuasion, example, or some other means. The key to leadership is, then, to a very important extent, the key to effective management.

THE TRAITIST THEORY OF LEADERSHIP

Probably the earliest organized attempt to explain the phenomena of leadership was made by writers who have come to be known as traitists. These men adopted an inductive procedure, observing those recognized as leaders and enumerating the traits each possessed. Qualities held in common were assumed to be essential, and an enumeration was offered as a standard for measuring leadership potential. Prominent among these traitists are such management theorists as Tead, Barnard, and Schell.

Ordway Tead. Tead has long been known for his writing in the field of leadership. His wide influence has enabled him to popularize a list of ten qualities he considers necessary in leaders, viz., physical and nervous energy, a sense of purpose and direction, enthusiasm, friendliness and affection, integrity, technical mastery, decisiveness, intelligence, teaching skill, and faith.[1] Although these traits were discovered by wide study and observation of leaders, Tead admits that all are not necessary in a given leadership situation. Anyone who possesses them, however, would surely be an ideal leader.

Chester I. Barnard. Barnard holds that leadership has two aspects.[2] The first is individual superiority in the area of leadership techniques: a person outstanding in physique, skill, technology, perception, knowledge, memory, and imagination will command admiration and be able to lead subordinates. The second aspect includes individual superiority in determination, persistence, endurance, and courage.

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[1] Ordway Tead, *The Art of Leadership* (New York: McGraw-Hill Book Company, Inc., 1935), p. 83.

[2] C. I. Barnard, *The Functions of the Executive* (Cambridge, Mass.: Harvard University Press, 1938), p. 260.

Barnard does not specifically point out that he is talking about an ideal figure. He does, however, identify the second aspect of leadership with his specially coined definition of responsibility. Unfortunately, he does not apply the list of qualities to the problem of determining leadership potential.

Erwin H. Schell. Schell's view is that, although it is useless to list all the traits essential to executive success, there are certain personal characteristics—interest in, and affection for, people, power of personality, and a scientific trend of mind—which, if *not* present, would seriously diminish the chances for such success.[3] Schell does not explain the source of his listings, but the implication is rather clear that it is based upon his personal observations.

The social psychologists. The basic research for the traitist adherents has been undertaken by the social psychologists, who have steadily improved their techniques and given considerable thought to the problems relating to their assumptions and terminology. But it is the opinion of competent men in the field[4] that there is no evidence of common traits of leadership, that no apparent reason has been developed to support the need for universal traits, that the question of the possible difference between traits essential to *becoming* a leader and those necessary for achieving leadership success has not been met, and that traits essential to interleader relationships have not been studied.

Inadequacies of the traitist approach to management literature. Probably the first reaction of the reader examining the work of the traitists is one of confusion. The writers fail to explain the nature of their sample and are quick to generalize. The number of men observed, the adequacy of the sample, the period of time involved, the stage of growth of the enterprises concerned, the stage of the cycle, and numerous other considerations necessary for final judgment are never stated.

But even if these problems were settled satisfactorily, the matter of identifying leadership traits would remain. No two lists by the traitist writers agree. This fact may be due to the discovery of different qualities or to semantic difficulties. If the former supposition is correct, the first step would be to discover what leadership traits are and find a method of identifying them. If the second difficulty is at issue, it is necessary to secure agreement on the meaning of terms.

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[3] E. H. Schell, *The Technique of Executive Control* (6th ed.; New York: McGraw-Hill Book Company, Inc., 1946), pp. 15–18.

[4] A. W. Gouldner (ed.), *Studies in Leadership* (New York: Harper & Brothers, 1950).

Finally, none of the three writers was able either to define success or to name the traits essential to it. This difficulty suggests that the "essential" leadership traits are not really essential at all. The reader does not even know how many traits are necessary. If there are ten, will a leader be successful if he has only seven?

SITUATIONIST APPROACH TO LEADERSHIP

Those who advocate the situationist approach are concerned, not so much with developing a theory of leadership, as with creating a new means of identifying leaders. Their starting point is to assume that certain elements such as speech, intelligence, stability, and persistence are essential in leaders. The next step is to place a candidate in a group and observe how he acts under trial situations that are constructed as realistically as possible.

Use of situational tests in officer selection. The German general staff is credited with having evolved situational tests in the mid-1920s. Their purpose was to improve the leadership abilities of future army officers, and to achieve this end they were willing to employ radical methods. Their program, as developed and employed through World War II, was comprised of the following elements: [5]

1. Situations involving social action:
    a. Use of hand and foot levers in accordance with complicated signals flashed on a screen—to test stability and persistence
    b. Carry out orders under various handicaps—to test speed of recovery of emotional balance
    c. Instruct a group of soldiers in an unfamiliar task—to test qualities of courage and inspiration
    d. Engage in group games—to test emergent leadership
2. Intelligence analysis: use of devices to test ability to think quickly and to use available knowledge
3. Background analysis: intimate interview to learn the history and attitudes of candidates
4. Expression analysis: in all situational tests note taken of the effect on other persons of changes in the candidate's speech and poise

The armed forces of the United States also experimented freely with the situational technique in an effort to improve officer selection. But perhaps the most thoroughgoing experiment was that undertaken by the Office of Strategic Services. The examining group consisted of psychologists who devised numerous tests requiring "quick planning, coordination of muscles with or without instruments and/or coordination of ideas and words—many of which assignments would have to be executed in collaboration with other people."[6]

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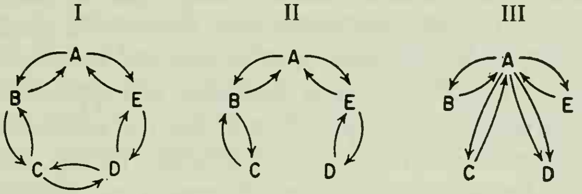
[5] H. L. Ansbacher and K. R. Nichols, "Selecting the Nazi Officer," *Infantry Journal,* vol. 49 (November, 1941).

More recent studies in the area of communication have thrown additional light on the situational emergence of the leader.[7] Viewing the basic enterprise problem as one of gathering and disseminating information, laboratory experiments have been undertaken to determine the effect of varying conditions for the exchange of information on speed, accuracy, organization, emergence of the leader, and morale. Figure 2, developed by Bavelas and Barrett, summarizes their results. Three communication nets are illustrated. In situation I each of the five members in the group is free to exchange messages with his two neighbors. In situation II direct communication between D and C is not permitted. They can exchange messages only with B and E respectively. A, B, and E continue to communicate with their two neighbors, with A having a slightly higher index of centrality, probably because of his location between two other well-placed persons. In situation III, A sends messages directly to each of the others and receives messages from them, but they are not permitted to communicate with anyone but him.

Fig. 2. Relation between group characteristics and selected communication nets.



Item	*I*	*II*	*III*
Speed	Slow	Fast	Fast
Accuracy	Poor	Good	Good
Organization	No stable form of organization	Slowly emerging but stable organization	Almost immediate and stable organization
Emergence of leader	None	Marked	Very pronounced
Morale	Very good	Poor	Very poor

These experiments have a bearing upon the situationist theory of emerging leadership. They imply that the leader is by definition the person possessing the maximum information and that, on the other hand, no leader emerges if all participants have equal access to information. Hence, the emergence of a leader could be predicted according to the type of communication system developed, and the grouping of persons could be arranged in such a way that both the formal and the informal organization structure would facilitate the emergence of the *same* person in a leadership role.

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[6] H. A. Murray and D. W. MacKinnon, "Assessment of OSS Personnel," *Journal of Consulting Psychology*, vol. X, no. 2 (March–April, 1946).

[7] A. Bavelas and D. Barrett, "An Experimental Approach to Organizational Communication," *Personnel*, vol. 27, no. 5, pp. 366–371 (March, 1951).

In an operating enterprise it would be undesirable to place too much confidence in the practical application of these tentative conclusions, for Bavelas and Barrett have abstracted much from the work situation. In a realistic situation a whole host of additional factors, including individual personality, empathy between individuals, and the impossibility of confining communication to the specified paths, would be present. Thus, the official path of certain types of information is but one element, and perhaps a minor one, in the total situation from which the leader emerges.

Evaluation of the situationist approach. The situationist approach to the discovery of leadership potential is both novel and challenging. It is an organismic approach, based upon a valuation by several examiners of an individual's behavior and including data for forecasts of future performance. Its usefulness at this time, however, is questionable. To the extent that leadership traits must be assumed before testing for them, the approach begs the question. And since this approach has not been solely situationist, it is improper to attribute the results of the total selection procedure to the situation-testing phase. Finally, the fact that this approach has been confined experimentally to the selection of army and police officers suggests the need for further research.

Other Research in Leadership

The current picture of research in leadership is one of unorganized but widespread activity.[8] The most striking feature of the published results of investigations is their reflection of the original training and the basic philosophy of the writers.

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[8] Particularly noteworthy is the work at such universities as California, Carnegie Institute of Technology, Chicago, Michigan, Ohio State, Princeton, and Rochester. In addition there are the contributions of such nonacademic organizations as the Institute for Research in Human Relations, the Department of the Navy, and the Philadelphia Personnel Council. The variety of approaches that Navy sponsorship has permitted is emphasized in H. Guetzkow (ed.), *Groups, Leadership and Men* (Pittsburgh: Carnegie Press, 1951); H. Sanford, *Authoritarianism and Leadership* (Philadelphia: Stephenson Brothers, 1950); *Annual Report of Research Activities Supported by the Office of Naval Research* (Ann Arbor, Mich.: Institute for Social Research, University of Michigan, 1951; mimeographed); *Annual Technical Report* (Los Angeles: University of California at Los Angeles, 1952; mimeographed); and *Studies in Naval Leadership* (Columbus, Ohio: Research Foundation, Ohio State University, 1951–1952; mimeographed).

Much of the work still exhibits the characteristics of an elementalist approach to leadership. The men who take this view are concerned with refining the concepts of leadership traits, correlating these with leadership success, and thus developing a value for each. It is their hope that candidates for leadership positions may then be selected according to the scores made on a battery of tests focusing on the elements in question.

Sanford takes a different view. Because there is no evidence of leadership traits and because the situationist approach is incomplete, his approach is to learn about the leader by studying the followers. He believes[9] that leadership is a relation between leader and follower that varies with the behavior of the leader, the predispositions and expectancies of the follower, and the supra-individual characteristics of the social situation in which leadership occurs. In his studies he has been aided considerably by those on authoritarianism carried out at the University of California at Berkeley and by the improvement in group descriptions achieved by Cattell at the University of Illinois.[10]

There are faint signs that the various approaches to leadership will be subsumed in the techniques of organized interdisciplinary research. Such has been the pattern in other fields of investigation, and leadership research has now reached a point where the basic problems, the question of personal interrelationship, and the issues of transferability of leadership skills are clearer than ever before. Investigators can now see the problem in its proper context and should be able from this point to make considerable progress.

The Nature of Leadership

Leadership—the activity of persuading people to cooperate in the achievement of a common objective—is accomplished in a triangular set of circumstances. All leaders are necessarily concerned with the enterprise objective, the goals of the followers, and the achievement of their own satisfactions. A high order of leadership is required to solve these equations simultaneously.

Analysis of the elements of the relationship. The purposes of group activity are to accomplish such objectives as (1) those beyond the power of any individual, (2) those which the group itself considers desirable, or (3) those which individuals in the group see as their best means of maximizing their personal satisfactions. People band together, for example, to achieve the physical security the single individual lacks. A political organization may make possible the pursuit of universal literacy, the achievement of which could scarcely be said to benefit the original promoters. It is to achieve the third objective, however—the maximization of personal satisfactions—that nearly all group activity is called forth. For here are found political parties, universities, churches, places of employment, and clubs of one kind or another.

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[9] Sanford, *op. cit.*, pp. 3 ff.

[10] R. B. Cattell, "New Concepts for Measuring Leadership, in Terms of Group Syntality," *Human Relations*, vol. IV, no. 2 (1951).

It is important to understand that the objectives of leaders and individuals in the group are not necessarily identical with the objective of the enterprise. Group action may have as its purpose maximization of profit, relief of the wretched, expansion of knowledge, world peace, detention of prisoners, or the winning of a war. The actual achievement of these objectives, nevertheless, might be only distantly related to the total satisfactions obtained by the individuals or leaders concerned.

The goals of nonleaders in group activities are intensely personal and are measured in terms of living standards, appreciation by others, leisure time, pleasant interpersonal relationships, personal influence on current and future events, and a sense of ethical achievement. For these, individuals select professions, schools, places to work, and social and religious units. But the selection is made with respect to what the individual will get out of the association rather than with the view to aiding the enterprise achieve its objective. A person may work for the Chrysler Corporation, feeling only the most remote interest in its profit position; he may join the Elks because his friends are there; he may even join a university staff because he wants to do pure research and not because he wants to teach.

The group leader may have personal objectives that are quite distinct from either those of his followers or that of the enterprise. First of all, as a person, he has personal satisfactions to realize and is in this sense no different from his followers. But, in addition, the leader achieves a sense of power in persuading others to cooperate and can build his successes to reach a position of great prestige. The achievement of the enterprise objective thus seems unreal if it does not contribute to the maximization of his own satisfactions.

Another factor in the leadership situation is the relative freedom of the individual to change his participation in given group activities. He may change his place of employment, his geographic location, his social clubs, his stock ownership, his school, or his church. Americans prize such freedom even when it proves frustrating to others and complicates the leader's job. There are, of course, limitations upon it, ranging from the disadvantages of job changing, moving costs, and social disapproval to the near impossibility of gaining freedom from service in the defense forces or in penitentiaries.

Still another element is the impact of other leaders and other groups. It may be necessary, and certainly it is human, to judge performance by comparisons. Presidents are rated against past presidents, sales managers against those in other companies, foremen against foremen, and even controllers against the heads of other departments in an enterprise! The fact that the process makes no sense because of the inconstancy of other factors does not interfere with its practice.

Complementary nature of personal and enterprise objectives. The enterprise is a social unit that is held together because the activities of the people involved have three results: (1) the maximizing of satisfactions of the members of the group, (2) the maximizing of satisfactions of the leader, and (3) the making of progress toward the achieving of the enterprise objective. It is one of the wonders of organized activity that such diverse results are achieved simultaneously.

The older view of this problem was that employees, managers, and the enterprise itself had the same interests and objectives to achieve. How often one has heard that managers and workers have a common interest in profit making! This view and others assuming common objectives of everyone in such activities as the Red Cross, schools, and churches are now known to be extraordinarily naïve.

The leader's special function is to act in such a way that he and his followers can maximize their satisfactions. He can maintain his position, whether in union leadership, political-party leadership, and even gang leadership, only by virtue of his followers' acceptance. Yet somehow the activities that satisfy his followers' needs must also result in satisfying his own. Otherwise, he would not lead. Thus, despite the wide differences in personal objectives, the leader must show the members that they can best realize their needs by undertaking activities beneficial to himself. Persons who may want such diverse things as guaranteed prices, prosecution of monopolies, union shops, civil rights, and subsidies may join a political party whose leader promises all these things because, for him, this is the road to wealth, power, and prestige. Should he fail to deliver the values sought, he will be deserted for other leaders.

The relation of leadership to managership. The manager, in order to achieve enterprise purpose, must be able to persuade individuals to cooperate with him rather than with competing leaders. He must, therefore, be a leader successful in developing a followership. If he possesses authority and exercises it, he will be able to use additional force in the form of sanctions to secure compliance.

Leadership, viewed broadly enough to include all managerial activities that secure followers, implies much more than mere personality. The true leader is not confined to relying upon social adaptiveness and other personality factors but will use all forces consistent with developing a followership. Thus he will utilize such environmental factors as climate, standing in the industry, and reputation in order to persuade prospective employees to enter into a cooperative relationship.

The quality of the manager's leadership may best be adjudged by the number and qualifications of individuals who desire to follow him. At one end of the scale is the manager who attracts a few straggling and intermittent employees whose chief asset is that of being human. At the other end is the one with a long list of exceptionally able persons anxious to work for him.

Two components are frequently overlooked in the evaluation of leadership. Good leadership is a characteristic developed through time. Quick acceptance by followers is a rarity. For this reason enterprises may take the long view in developing favorable reputations. The second factor is exemplified in the enterprise with many managers all of whom exercise leadership but in widely varying degrees. The prospective follower may be persuaded to obligate himself by the first manager he meets or by the reputation of the firm for good management. For instance, nonmanagers may be obtained solely as a result of the leadership activities of the personnel director. On the other hand, the director may be a handicap in this respect, but still prospective employees may be attracted by the reputation of the first-level managers or the president.

In summary, managers are leaders to the extent that they secure followers or subordinates in the number and quality that best suits the enterprise operations. The additional duties of planning, organizing, directing, and controlling, however, require that managers be more than leaders but need to be skilled in all the executive functions.

Various objectives of enterprise components. Various enterprises differ rather widely in the objectives that they seek. It is important to ask, therefore, whose objectives are being considered when the group purpose is mentioned. In a political party the components are members and leader. This is true also of a trade union, a social club, or a church, each of which has as its objective the satisfaction of certain needs of the participants.

On the other hand, business enterprises, schools, and the Red Cross are different. In a business the objective is usually to make a profit for the owners; in a school, to raise the level of knowledge; and in a Red Cross unit, to relieve suffering. In each case, there is very little relation between satisfying the needs of the followers and attaining the enterprise objective. Thus, the manager of such an enterprise has a much more complex job: he must not only persuade the followers that they can maximize their satisfactions by remaining in the group but must also see that the enterprise objective is achieved and that his personal needs are satisfied. Achieving harmony of purpose in enterprises with so many components is no easy task.

Characteristics of leaders. Out of the extensive research into the psychology of leadership has emerged in fairly clear outlines a group of neotraitist characteristics that, presumably, serve to identify leaders.[11] Whether one approaches the problem inductively or deduces the essential factors from the nature of the leader's job, the results are remarkably consistent, a fact that suggests that the common characteristics probably have been circumscribed in a general way. Future research may well be concerned with refining concepts, developing consistent and accurate terminology, evaluating the several characteristics, determining the extent to which leadership skills are transferable, and developing and validating tests for potential leadership.

There is general agreement among psychologists that leaders possess an intelligence somewhat above the average of their followers. The chief difficulty the highly intelligent person has seems to be that of communication. He can hardly motivate followers if they cannot understand him. This view of intelligence among leaders is, however, based upon observation and does not necessarily mean that men with markedly superior intelligence *cannot* be successful in this role.

Successful leaders tend to have broad and well-rounded interests, a reflection, perhaps, of an extensive curiosity and good instruction. On the other hand, this characteristic may be a resultant of the environment in which men exercise leadership. The leader of a local union or the owner of a small factory conceivably might not possess such breadth. But the head of an international union, a political party, or a church would possess these characteristics in considerable degree.

Since language is necessary for communication, it is not surprising that leaders ordinarily possess unusual verbal facility. This characteristic is necessary in interpreting the enterprise objective and their own purposes to followers and inducing them to follow by showing them how their own satisfactions will be enhanced by undertaking the activities of the enterprise.

Leaders are usually mentally and emotionally mature. Mental maturity, frequently, though incorrectly, referred to as common sense or good judgment, includes habits of scientific methodology and understanding. The possession of emotional balance is even more important. Leaders cannot afford to become panicky with the crowd, unsure of themselves in the face of conflicting forces, doubtful of their principles when challenged, or pliable with influence.

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[11] C. E. Goode, "Significant Research on Leadership," *Personnel*, vol. 27, no. 5, pp. 342–350 (March, 1951).

Leaders are possessed, too, by a powerful inner drive. They feel, or at least act as though they feel, an extreme urgency to satisfy their personal desires. In leadership they see the best way of achieving these ends and, as a consequence, *want* to lead, actively seeking out leadership opportunities. In contrast are those who lead reluctantly, unable to refuse to serve even while knowing the results will be inferior. History is replete with instances of such wrong selection. The political philosopher may be no party leader; the natural scientist, no executive. Old and respected men in times of peace may be inadequate figures in time of war; and the conservative, an unhappy choice for a revolutionist. Basically, these tragedies result from a lack of knowledge of leadership and from the easy assumption that a person respected in one field will be successful in another.

A leader, finally, understands the importance of cooperation. Those who have been successful in leadership roles are, by definition, those who have persuaded followers to cooperate. However, researchers may not conclude from this situation that leaders actively practice the social skills. There is no proved relationship between these variables.

Evaluation of leadership characteristics. There is no present basis upon which the several common characteristics of leaders can be weighed. The number of characteristics and the degree of excellence essential in given cases are unknown, as is the possibility of substitution among them. It is also unknown whether particular leaders require the common elements in varying proportions. All these questions are obviously of the greatest importance, not only from the point of view of the expansion of knowledge, but also from that of the person selecting potential leaders.

Transferability of leadership skill. From the subjective viewpoint it may appear that there is a high degree of transferability of leadership skill, since this facility is characterized by above-average mental ability, a desire to lead, and the several personality factors. But psychological research casts doubt upon this supposition.[12] The current view is that the leader is equally effective in similar situations but that different skills are employed in widely different ones. Thus, the leadership characteristics of the head of a large-scale enterprise would be readily transferable to other large-scale firms, but those of the gang boss and the university president might be ineffective in a merchandising enterprise.

The reference to different leadership skills is most likely careless terminology on the part of psychologists. From what is now known, there appears to be no reason to suspect different skills at play. Rather, the evidence of low degrees of transferability of this skill should be looked upon as proof that the various characteristics are weighted differently in different occupations. Leadership consists of the sum total of the persuasive factors brought to bear upon prospective followers in order to motivate them. The skill of this accomplishment, given certain environmental factors that may be called advantageous or otherwise, is the measure of the quality of leadership. Thus leaders will emphasize different motivating factors, depending upon their psychological insight. The union boss may stress the 35-hour week, the university president may build up academic freedom, and the banker may emphasize agreeable environment, but they all may get results. If their positions were interchanged, however, none would likely get results with the same appeals. Academic freedom would hardly entice laborers and bank employees, as short hours would mean little to a professor, or association with the best people, little to either laborers or professors.

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[12] *Ibid.*

All three leaders, it should be noted, may be wrong in their estimates of the *real* factors at work. Each may be appealing to an inferior motive. Indeed, this is the vacuum in which most leadership is lost. The most effective motivation, however, is that of the satisfaction of basic personal needs. When further knowledge of personal psychology and the ability to translate this information into the group relationship have been gained, leadership may require, not different skills, but rather the assignment of different weights to personal needs. The study of leadership will evolve from the present stress on the leader's personality to that on the satisfaction of the needs of his followers.

Performance and Supervision

The broadening of psychological knowledge in the area of personal motivation has naturally led many people to wonder whether "good" or "bad" motivation has a discernible effect upon the productivity of subordinates. On the surface one might expect that the creation of conditions favorable to the satisfaction of an employee's needs would encourage him to produce more and better goods or services. The proper way to expand productivity, therefore, would be to discover what men strive for and then enable them to attain it. As yet, only tentative results of the current research in this area have appeared.

University of Michigan studies. Members of the Institute for Social Research have been interested since 1947 in studying the relation between the quality of supervision and morale and productivity of employees. On the basis of participating-company records they identify comparable high- and low-production groups. These are then studied by means of interview and questionnaire, with a view toward identifying the differences in the quality of supervision apparently causing differences in output and morale.

The scope of the studies has thus far been very limited, an observation which is by no means a criticism but which points to the necessity for caution in the interpretation of results. Among the firms studied were an insurance company, a railroad, a motor company, and a public utility. Very few groups in each were investigated, and all were at the first level of supervision above the workers. Consequently, the managers involved were at the bottom of the organization structure.

It is the view of the Michigan group that productivity and morale are related, though in a complex and sometimes contradictory way, to good supervision. This latter term describes foremen and their counterparts, who see that there is good communication both upward and downward, who succeed in interpreting the company to employees, who listen to employees' suggestions and pay attention to their needs, and who will go to bat for them when necessary. In other words, by enabling employees to maximize the satisfaction of their needs, the supervisor achieves productivity and morale as by-products. On the other hand, the poor supervisor—the driver, or "close" supervisor—stresses the company's insistence upon output. Other factors apparently related to morale [13] and output are the better performance of small groups and of the employee's opportunities to exercise his skills. Of course, the supervisor may have nothing at all to do with these factors in the work situation.

Perhaps the most important result of the Michigan studies has been to cast doubt on the hypothesis that productivity and morale are positively related. When personal needs are satisfied in ways that also contribute to enterprise goals, morale and productivity take on a positive correlation. But there are many elements in morale that can be satisfied without contributing to enterprise objectives; again, the degree of such satisfaction may vary. Employees may show high job satisfaction but feel very much dissatisfied with the organization as a system. The effect of these contradictory elements on productivity is extremely complex and difficult to forecast.

Ohio State University studies. Since 1946 the Ohio State University Research Foundation has been actively engaged in the study of leadership.[14] Its point of departure was to determine what the leader in enterprise does and how he goes about it. A comprehensive list was drawn up, therefore, enumerating activities in which leaders (a term used by this group as synonymous with manager when the latter is engaged in direction) were observed to be engaged. Particular executives were then asked to indicate the amount of time spent in each category. Although difficulty was encountered in enumerating the dimensions of leader behavior, a necessity in determining how a leader goes about what he does, a tentative list included such subjects as integration (increasing cooperation), communication, production emphasis, representation, fraternization, organization, evaluation, initiation (changing group activities), and domination.

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[13] Morale seems to be a composite term which includes (1) satisfaction with immediate supervision; (2) job satisfaction and prestige satisfaction afforded by the job; (3) satisfaction with the organization as a system; and (4) indirect satisfactions, which include wages, promotions, and a chance for horizontal transfer. R. L. Hahn, "An Analysis of Supervision, Practices and Components of Morale," *Human Relations Program of the Survey Research Center* (Ann Arbor, Mich.: Institute for Social Research, University of Michigan, 1950).

[14] J. K. Hemphill, *Leader Behavior Description* (Columbus, Ohio: Personnel Research Board, Ohio State University, no date).

It is, perhaps, much too early to evaluate the accomplishments of the Ohio group. It is making an organized and intensive assault upon certain phases of leadership behavior, and students of management, as well as those in related fields, will continue to be interested in the product of its research.

Studies by the University of California at Los Angeles. Since 1950 the Human Relations Research Group of the Institute of Industrial Relations has been carrying on a long-range research program in the area of motivational factors in productivity.[15] So far, the research has been confined to studies made within a naval research and development laboratory. Here two divisions have been designated for study—one with restrictive management, the other with permissive management. Extremely difficult problems of measurement have been encountered, and caution is still necessary in judging results because of the small number of persons in the divisions being studied.

The tentative findings of the relationship between supervision in the restrictively led division and that in the division permissively led may be listed, as follows:[16]

1. The number of levels between individuals' perceived work group and various higher echelons is inversely related to the ratings of perceived productivity and morale.
2. Individuals in the permissively led division rated their job satisfaction, perceived productivity of the division and laboratory (but not their respective work groups), and perceived morale higher than did individuals in the restrictively led division.
3. Superiors in the restrictively led division rated the job satisfaction of their subordinates lower and the productivity of their subordinates higher than did the subordinates themselves. Both groups estimated morale at about

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[15] *Annual Technical Report* (Los Angeles: Institute of Industrial Relations, University of California at Los Angeles, 1952; mimeographed).

[16] I. R. Weschler, M. Kahane, and R. Tannenbaum, *Job Satisfaction, Productivity and Morale: A Case Study*, (Los Angeles: Institute of Industrial Relations, University of California at Los Angeles, 1952).

the same level. On the other hand, the superiors in the permissively led division rated their subordinates lower on all three factors than did the subordinates themselves.

4. In the restrictively led division, job satisfaction was inversely correlated with perceived productivity, while in the permissively led division the reverse was true.
5. In the restrictively led division, job satisfaction and morale were positively correlated. This result was not nearly so clear in the other division.
6. There were no differences between the divisions in the perceived positive relationship between productivity and morale.
7. The supervisors in the restrictively led division rated job satisfaction, productivity, and morale lower than their subordinates. The reverse was true in the permissively led division.
8. The supervisors in the restrictively led division rated all three variables lower than did their opposites in the other division.

Two observations on these conclusions may be made. First, the data suffer from the obvious discrepancy between items (3) and (7) above; the question remains of the feasibility of applying statistical techniques; and there is an eager attempt at generalization. Secondly, the report should be viewed with high interest, for it suggests avenues of research that eventually may illumine the relationship between the quality of supervision and the productivity of employees.

The Permeating Effect of the Leader

A phenomenon of extraordinary importance is the way in which the influence of the top leader of a group filters through an organization structure, touching each member as it seeps by and largely accounting for the reputation of the enterprise. This permeating effect of leadership is difficult to describe. The identity of the leader himself is well known within the group, but the place he occupies may vary. He may be a prominent stockholder, a member of the board, the president, or a major department head. Whoever he is, he is the one who gives tone to the enterprise by the way he selects and employs motivating forces and by the skill and timing with which he manipulates them.

Such a leader has the right touch. Anyone reviewing his own personal experience with groups can point to those who stand out by virtue of their skilled leadership. Their enterprises are known by the quality of the people who want to belong, the high spirit of cooperation among members, and the respect of responsible elements in society. Why else is a Wood of Sears Roebuck, a Sloan of General Motors, or a Rickenbacker of Eastern Airlines so well and favorably known except by the permeating effect of their high-quality leadership on the members of their enterprises?

But evidence of this influence is more tangible than that of its counterpart.[17] Those who train executives know that junior men, while learning their lessons well, will apply them only if their own superiors do. The permeating effect of leadership, then, is not always a blessing, since it characterizes both good and bad leadership and since subordinate managers will imitate their superiors whether the model be good or bad. If the superior managers believe in decentralizing power, in encouraging initiative, in facilitating communication both upward and downward, and in developing group participation, then their immediate subordinate managers will behave in a similar way. If, on the other hand, the leader is on the side of centralized power, distrust, ignorance, and slovenliness, his influence will filter through the organization structure as speedily and thoroughly as that of the excellent manager.

Responsibilities of Leadership

The responsibilities of leadership are comprised of the obligations that are owed to the enterprise and to the society of which the firm is a part. In his role as a leader the manager is obliged to act with both integrity and efficiency in achieving highly coordinated teamwork among his subordinates with the dominant purpose of accomplishing the enterprise objective. If he is lower in the organization structure than a general officer, the manager seeks the accomplishment of his section or department objective so as to contribute its full share to the total purpose. There cannot be any doubt about the primacy of the enterprise objective. The principle of complementary goals of the firm, the leader, and followers makes certain that the best long-run interests of all persons in the associative activity will be served by the realization of the group objective.

The manager, in his capacity as a leader, also has an overriding obligation to society. He has a moral responsibility to select enterprise objectives and employ techniques that will be consistent with the general welfare. He is not free to adopt an objective whose achievement will result in fraud, endanger the health of persons, or infringe upon the rights of others, nor is he free to select methods of motivating his followers that are injurious to societal objectives. The social responsibility of managers is discharged when they act in such a way that they contribute, to the full extent of their ability, to the realization of socially approved purposes.

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[17] A. Zaleznik, *Foreman Training in a Growing Enterprise.* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1951); F. J. Roethlisberger, "Training Supervisors in Human Relations," *Harvard Business Review,* vol. 29, no. 5 (September, 1951); C. L. Shartle, "Leadership Aspects of Administrative Behavior," *Advanced Management,* vol. 40, no. 11.

Selected References

Barnard, C. I., *Organization and Management*, Chap. 4. Cambridge, Mass.: Harvard University Press, 1948.

Beishline, J. R., *Military Management for National Defense*, Chap. 15. New York: Prentice-Hall, Inc., 1950.

Davis, R. C., *The Fundamentals of Top Management*, Chap. 5. New York: Harper & Brothers, 1951.

Haiman, F. S., *Group Leadership and Democratic Action*, Chaps. 5, 6. Boston: Houghton Mifflin Company, 1951.

Hall, J. B., "Leadership in an Evolving Organization," in M. Bower (ed.), *Development of Executive Leadership*. Cambridge, Mass.: Harvard University Press, 1951.

Warner, W. L., and J. O. Low, "Managers and Owners, Then and Now," in A. W. Gouldner (ed.), *Studies in Leadership*. New York: Harper & Brothers, 1950.

PART TWO

ORGANIZATION

6

SPAN OF MANAGEMENT[1]

Although there may appear to be some logic in dealing with the planning function of managers before discussing organization, managerial functions are, in a going enterprise, accomplished practically simultaneously. A manager continually plans, organizes, staffs, directs, and controls, and there is no strong reason for dealing with the functions of management in any particular order. On the other hand, the function of organizing has been given more attention than the others, and its principles are more thoroughly developed. Moreover, an understanding of organization theory will be helpful in grasping the implications of the principles underlying the other managerial functions.

Organization is here regarded as the establishment, with necessary authority and with provision for coordination, of relationships between persons assigned the performance of specialized tasks for the achievement of enterprise objectives. It is thus the structural relationships by which an enterprise is bound together and the framework in which individual effort is coordinated.

The essential questions of organization are:

1. Why departmentize?
2. How should activities be grouped?
3. What kind of and how much authority should be allocated throughout the organization structure?

The answer to each will cast light on the nature of organization and lay bare underlying principles that can be used as guides in the analysis and solution of organization problems. Most problems of management, with their numerous alternative courses of action, derived from countless material and human factors, cannot be solved by a single answer. The principles are, therefore, merely guides. They point, nevertheless, toward the conceptual framework necessary before the scientific methods of chemistry, mathematics, psychology, or the social sciences can be effectively applied to the problems or organization.

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[1] In much of the literature of management this principle is referred to as the "span of control." Despite the general use of this term, the authors prefer to use "span of management," since the span is one of management and not merely of control, here regarded as a basic function of management.

Problems is how many department
to top executive
[illegible] answer good management
[illegible] within optimum [illegible]
And still

The Concept of Departmentation

"Department" is a general term used to designate a distinct area, sphere, division, or branch of an enterprise over which a manager has authority for the performance of a specified group of activities. In a broad sense, departmentation is equivalent to organization as a grouping of activities and the assignment of authority for the purposes of gaining efficiency and coordination. However, in order to distinguish the problem of authority relationships, the principal emphasis on departmentation here will be on the problems of assignment and grouping of activities.

In the general use of the term, a department may be the production division, the sales department, the West Coast branch, the market research section, or the accounts receivable unit. In many enterprises, departmental terminology is loosely applied; in many others, especially larger ones, more attention is given to terminology because it indicates hierarchical relationships. Thus, a vice-president may head a division, a director a department, a manager a branch, and a chief a section. Some of the best examples of this relationship of terminology to status may be found in the Federal government departments. In the typical executive department, the hierarchy tends to run from office or bureau to divisions, branches, sections, units, and subunits.

Indeed, in an enterprise requiring successive subordinate groupings, exact definitions may become imperative, since each term carries connotations of power and prestige and often of salary. If the vice-president of production heads a *division*, the vice-president in charge of sales will hardly be satisfied to head a *department*. While the actual terminological usage may differ from one business to another, within the enterprise strict adherence to hierarchical differentiations is far more than a question of semantics. Indeed, in some large organizations, it is not always easy to find enough appropriate designations, especially where such terms as "bureau" have unacceptable inferences.

On the other hand, terminology of departmentation in small-scale businesses—which may in fact be so small that they are not even organized—may have little meaning. There may be no departmental level lower than that under the direct supervision of the chief executive. But some enterprises with no real need for subordinate departments may be divided into numerous sections on the theory that unremunerated activities will be undertaken if the volunteers have titles. The giving of title in place of pay—a frequent practice in nonbusiness enterprises—is not unknown in business itself.

A department exists whenever groups of activities are placed in charge of a specialized manager. No district, section, division, or other sphere of activity can be operated effectively without a responsible head. If a managerial position is not staffed, the activities of the department will be regrouped and assigned to other executives.

The Process of Departmentation

The process of departmentation of any enterprise consists of a definition and enumeration of individual tasks, a grouping and classification of the tasks, the delegation of authority for their accomplishment, and the specification of authority relationships between managers. Application of scientific method to the process would indicate the following steps: (1) the establishment of enterprise objectives; (2) the formulation of plans and policies for their accomplishment; (3) the determination of activities necessary to execute these plans and policies; (4) an enumeration and classification of the activities; (5) a grouping of activities for greatest effectiveness in terms of enterprise objectives; and (6) assignment to each group, normally through its head, of the authority necessary to perform its activities. Organization is not completed, however, until these groups are tied together horizontally and vertically by authority relationships.

Same steps as in Planning

This logical growth pattern tends to agree with the normal historical process of departmentizing from the ground up. The owner or promoter of a new, small business proceeds by hiring men as the size of his business requires. When the point is reached beyond which he is unable to employ, train, supervise, and control additional employees, subordinates are grouped in one or a few sections, and a supervisor or manager appointed for each. Two levels then exist in the organization hierarchy. Further expansion of the labor force would give rise to more sections. When the chief executive can no longer properly manage many subordinate managers, he will group them in departments and appoint a manager for each. Thus three organizational levels would be created, and the chief executive removed one step further from the nonmanagers.[2]

Of course, in a going concern the problem of whether one builds from the top down or the bottom up does not arise. The organization process is continuous, and the normal expectancy is that the tasks themselves and their grouping will be simultaneously under consideration at all levels in order to bring the enterprise into tune with tested principles of association and assignment.

Reasons for Departmentation

There is a tendency to regard departmentation as an end in itself and to gauge the effectiveness of organizations in terms of clarity and com-

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[2] For an interesting case study of the process of departmentation, see Marshall E. Dimock, *The Executive in Action* (New York: Harper & Brothers, 1945).

[illegible] becomes the reason for organization

pleteness of departments and levels. While the grouping of employees to achieve the economies of specialization or to emphasize certain activities has apparent advantages, such proliferation of departments and levels of departments obviously creates additional economic and managerial problems.

Departments and levels not desirable per se. It cannot be said that the subdivision of activities into departments and the hierarchy of organization are desirable in and of themselves. In the first place, levels are expensive: as they increase, more and more of the effort and cost of the enterprise is devoted to managing, not only through the expense of additional managers but also through that of staffs to assist them and through other costs of coordinating departmentized activities. Then there are the costs of facilities for such personnel. It is not without significance that accountants refer to direct costs and overhead, or burden, costs. The real production in an enterprise is accomplished by work done by factory or sales employees, who are, or could logically be, accounted for as direct labor. Levels above the "firing line" are predominantly staffed with managers whose functions are not directly productive and the expenses for whom it would be desirable to eliminate, *if that were possible.* Most of the beautiful pyramid of organization represents a cost only indirectly, and sometimes remotely, related to the basic functions of the enterprise.

Secondly, the existence of levels complicates the problem of communication. Organizations with many levels or many departments on the same level have greater difficulty communicating enterprise objectives, plans, and policies throughout the enterprise than does the firm in which the top manager can communicate directly with his employees. Omission and misinterpretation are likely to occur as information passes down and up the scalar chain.

Finally, departments and levels complicate the problems of managerial planning and control. The plan that may be definite and complete at the top of an organization structure may lose these qualities as it is subdivided and elaborated at lower levels, resulting in a loss of timing, coordination, and clarity. Control—the function of making sure that events conform to plans—is likewise complicated: not only are there more subordinate managers to be controlled, but the complexities of planning and the difficulties of communication make this control both more important and more difficult.

Why departments and levels? Since departments and, more especially, levels are expensive in terms of costs and complications of management, there should be a compelling reason for them. The basic reason is found in the span of management, the incapacity of a human being to manage effectively an infinite number of subordinates. This characteristic, which has often been labeled the "span of control," refers to the number of subordinates that a manager can effectively handle. As will be shown, this number is not fixed, but depends upon several basic considerations applicable to the job to be done, the quality of management, and the ability of subordinates.

Departments exist because of the obvious limitations of human ability and of time. Without them the president or owner of an enterprise would be the *sole* manager, and every employee would be required to report directly to him. That this is not impractical or illogical in some cases is apparent from the many small businesses which operate precisely on that basis. If General Motors followed this practice, however, thousands of workers would be reporting directly to the chief executive officer!

The span-of-management explanation of departmentation must be distinguished from the economies of occupational specialization. Grouping of workers into occupationally specialized units may be found even in an unorganized business. Thus, a small printing shop might find it economical to have two persons who do nothing but typesetting, another two who operate presses, one who handles office work, and another who handles design and selling. Departmentation, however, would not be justified until the span of management of the executive were exceeded and groupings of activities under subordinate managers found necessary.

The Span of Management

That the span-of-management problem is as old as organization itself is apparent from the passages of the Bible dealing with the problems of Moses in organizing the exodus of the Israelites. The difficulties that Moses met and his manner of departmentizing to meet them are recounted in Exodus 18:13–26, in which it is recorded that Moses' father-in-law, noting that Moses was spending so much time giving counsel to so many individuals, advised him as follows:

> The thing thou doest is not good. Thou wilt surely wear away, both thou and this people that is with thee: for this thing is too heavy for thee; thou are not able to perform it thyself alone. Hearken now unto my voice, I will give thee counsel . . . thou shalt provide out of all the people able men . . . and place such over them [the people], to be rulers of thousands, rulers of hundreds, rulers of fifties, and rulers of tens. And let them judge the people at all seasons; and it shall be, that every great matter they shall bring unto thee, but every small matter they shall judge; so shall it be easier for thyself, and they shall bear the burden with thee. If thou shalt do this thing, and God command thee so, then thou shalt be able to endure, and all this people shall also go to their place in peace.

Moses thereupon followed his father-in-law's advice with the result that he

[illegible] more [illegible]
top management

> . . . chose able men out of all Israel, and made them heads over the people, rulers of thousands, rulers of hundreds, rulers of fifties and rulers of tens. And they judged the people at all seasons; the hard causes they brought unto Moses, but every small matter they judged themselves.

Every organization faces this problem. How many subordinates can a superior effectively manage? Obviously, the number of working hours in the day or week places a limit on the manager's ability. Whether this limit is small or large, students of management have found it to exist, usually at numbers of 4 to 8 subordinates at the upper levels of organization and from 8 to 15 or more at the lower levels. The prominent British consultant, Lyndall Urwick, for example, found "the ideal number of subordinates for all superior authorities . . . to be four," and "at the lowest level of organization, where what is delegated is responsibility for the performance of specific tasks and not for the supervision of others, the number may be eight or twelve."[3] An astute military observer has stated that he believes the proper number to range between 3 and 6, with 3 subordinates likely to be the most effective number near the top of an organization and 6 near the bottom.[4] Other observers find that the effective number is not nearly so small and that a manager may be able to manage 20 to 30 subordinates.[5]

In actual experience, one finds a wide variety of practice, even among admittedly well-managed enterprises. General of the Army Dwight D. Eisenhower had 3 line subordinates when he was Supreme Commander of the Allied Expeditionary Force in World War II, and none of these had more than 4 line subordinates. Yet the Army Chief of Staff had reporting to him and his deputies at least 15 major line and staff officers. In the General Motors Corporation in 1949, the president had reporting to him 4 executive vice-presidents, but one of these subordinates had 27 key officers, and another 14. A president of a large railroad, generally regarded as one of the best managed in the industry, had, in 1953, 10 top executives reporting to him, and one of these had 11 subordinates. Yet the head of another large carrier, not regarded as so well managed, had only 7 major subordinates. The president of one well-managed department store had 4 key executives, none of which had more than 5 subordinates, while an equally large and successful store showed 12 key executives reporting to the president and an equally large number of subordinates reporting to most of them.

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[3] Lyndall Urwick, "Axioms of Organization," *Public Administration Magazine* (London), October, 1935, pp. 348–349.

[4] Sir Ian Hamilton, *The Soul and Body of an Army* (London: Edward Arnold & Co., 1921), p. 229.

[5] J. C. Worthy, "Men, Management, and Organization," *Proceedings, Fifth Personnel Management and Industrial Relations Seminar* (Los Angeles: University of California at Los Angeles, Oct. 30, 1951; mimeographed). The term "subordinates" referred to in this section excludes minor personnel, such as clerks and stenographers.

That the span of management of business enterprises seldom meets in practice the test of 3 to 6 subordinates is apparent from a survey of 100 large companies made by the American Management Association in 1951.[6] The number of executives reporting to the presidents varied from 1 to 24, and only 26 of the company presidents had 6 or fewer subordinates. In these 100 companies the median number was 9. In the 41 smaller companies surveyed, 25 of the presidents supervised 7 or more subordinates, and the median was 8.

Graicunas's Theory of Relationships in Organization

One of the most interesting descriptions of the basic causes of the problem of span of management is that of the French management consultant, V. A. Graicunas. In a paper first published in 1933, Graicunas analyzed the problem of subordinate-superior relationships and developed a mathematical formula to high-light the geometric increase in complexities of managing as the number of subordinates increases.[7] While the mathematical applicability of the formula to any given case is open to serious doubt, it does serve perhaps better than any other device to focus attention upon the central problem of the span of management.

Types of subordinate-superior relationships. Graicunas's theory is based upon the finding of three distinct types in any given subordinate-superior relationship: (1) direct single relationships, (2) direct group relationships, and (3) cross relationships.

The direct single relationships are those most easily understood and recognized by a superior. They are the relationships of any superior directly and individually with his immediate subordinates and are, of course, equal in number to the subordinates supervised. Thus, if A has three subordinates—B, C, and D—there are three direct single relationships.

Graicunas saw the direct group relationships to be those between the superior and each possible combination of subordinates. Thus a superior might consult with one of his subordinates with a second in attendance, or with all his subordinates, or with various combinations. If A has three subordinates, these relationships might appear, as follows:

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[6] As summarized in *Business Week*, Aug. 18, 1951, pp. 102–103.

[7] V. A. Graicunas, "Relationship in Organization," *Bulletin of the International Management Institute* (Geneva: International Labour Office, 1933), in L. Gulick and L. Urwick (eds.), *Papers on the Science of Administration* (New York: Institute of Public Administration, 1937), pp. 181–187.

B with C
B with D
C with B
C with D
D with B
D with C
B with C and D
C with B and D
D with C and B

Thus, there would be a total of nine direct group relationships. To place these relationships in a mathematical form, where n is the number of persons supervised, the number of direct group relationships is $n\left(\frac{2^n}{2}-1\right)$.

While it may be objected that the relationship in the case of A's instructing B, with C in attendance, is no different from that of A's instructing C, with B in attendance, Graicunas implies that the relationship differs when the problem is addressed to B rather than to C, even though the same personnel are present. In this case, though, one may observe that Graicunas could have found three additional direct group relationships where three subordinates are considered. There may be cases where A is consulting equally with individuals in groups composed of BC, BD, and BCD, which would furnish a different psychological situation from any of those noted above.

A third group of relationships found by Graicunas has been identified as cross relationships. These are created by the necessity for the subordinates of a common superior to consult with one another. For the three subordinates B, C, and D, the cross relationships appear to total six, as follows:

B to C
B to D
C to B
C to D
D to B
D to C

The mathematical form for cross relationships Graicunas gives as $n(n-1)$. Although he did not recognize the possibility, the same line of reasoning, applied to the individual subordinates, might well yield three more possible cross relationships by recognizing group conferences of the three subordinates, initiated by any one of the three.

Mathematical summary of relationships. From the above analysis of direct, direct group, and cross relationships, Graicunas developed the following formula to give the number of all possible types of relationships no. of

increase in subordinates

of interest to, or requiring the attention of, the manager. Where n equals the number of subordinates, the number of all kinds of relationships will be given by the formula

$$n\left(\frac{2^n}{2} + n - 1\right).$$

The results of this formula are shown in Table 1.

Table 1. *Total Relationships with Variable Number of Subordinates*

Number of subordinates	*Total number of relationships*
1	1
2	6
3	18
4	44
5	100
6	222
7	490
8	1,080
9	2,376
10	5,210
11	11,374
12	24,708

The significance of the formula. The rapid rise in the number of relationships with the increase in number of subordinates is startling. An executive with four subordinates may well hesitate before adding a fifth member to the group, when by doing so he increases the total possible relationships for which he is responsible by 127 per cent (from 44 to 100), in return for a 20 per cent increase in subordinate working capacity.

Even if one should reduce the number of relationships by saying that no new one is created when A consults with B, with C in attendance, and then with C, while B is in attendance, or that the cross consultation of B with C does not differ from that created when C approaches B, the number of relationships is still large. And, as has been pointed out, Graicunas undoubtedly missed some that might logically have been included.

The accuracy of the formula is more seriously weakened by the fact that it does not deal with frequency or severity. The number of relationships is probably less important to an understanding of their complexity (as Graicunas appears to recognize) than are the frequency with which they occur and the severity of their demands.

The Graicunas theory does serve to emphasize the dramatic complexity created by a manager's having more than a few subordinates, seeming to approve of the often-accepted standard of three or four subordinates. But, most importantly, the formula serves as the key to the problem of span of management. For any managerial action that will reduce the number and frequency of relationships requiring the manager's attention will increase his span of management and thereby reduce the costs and inefficiencies of an undue number of departments.

FACTORS DETERMINING NUMBER AND FREQUENCY OF RELATIONSHIPS

In searching for the answer as to how many subordinates a manager can effectively control, one discovers that, aside from such personal capacities of an individual as that of comprehending quickly, getting along with people, and commanding loyalty and respect, the most important determinant is the manager's ability to reduce the frequency and severity of the relationships engendered by superior-subordinate association. This ability naturally varies with managers and jobs, but there are certain general factors that will materially influence the number and frequency of such relationships.

Training possessed by subordinates. One problem affecting the span of management is that of the extent to which the manager must engage in training and retraining of his subordinates. Clearly, the better the training of subordinates, the fewer the relationships requiring his attention. Not only does a well-trained subordinate require less time of the manager, but he will require fewer contacts with other subordinates in the same department.

Training processes call for time, energy, attention, and knowledge. The higher the management level, the more effort must be expended in discovering what to teach, as well as how to do it effectively. The successful discharge of this responsibility may materially reduce the time the manager can devote to other functions.

Of course, training is not altogether a negative factor. To the extent that it is effective, it lessens the need for direction and control, and the proficient subordinate will need less of the manager's time. Thus, a supervisor in the lower levels of organization can normally manage a larger number of subordinates than managers in upper levels, since the work at lower levels, being more specialized but less complicated, can be taught more easily. It is possible, too, that more effort has normally been expended at lower levels, a fact that is entirely understandable when one considers the relative difficulty of training a person to operate a punch press versus training him to manage an entire factory.

The training possessed by subordinates has a different impact in new industries and in more complex businesses. The training possessed by managers in the railroad industry would, for example, after the long development of technical knowledge, tend to be far more complete than that possessed by those in the airline industry. Similarly, the rapid changes in policy and procedures brought about in the complex electronic and aircraft industries would increase the problems of training subordinates.

The necessity for such training, however, is ever present. Often management, especially of old or static industries, makes the mistake of assuming that subordinates who have been raised in the industry are well trained as managers. To do so is to attempt to maintain the *status quo* in management and to overlook such recent developments as the application of management principles and techniques, the impact of technical change, and the fact that the human relations problem—especially as affected by national unions and big government—no longer knows the boundaries of a single company or a single industry.

Number of interrelationships requiring supervisory attention. While effective training procedures will enable a manager to reduce somewhat the number of interrelationships requiring his attention, the principal cause for the multiplication of interrelationships is to be found in the uncertainty of management objectives, plans, and policies. The successful manager, therefore, will need to make sure, first, that he understands the objectives, plans, and policies of his superiors. Secondly, he will need to formulate those of the department and communicate them to his subordinates. Having done this, he will delegate the necessary authority to his subordinates in such a way that it is delineated between subordinates, is adequate for the job, and is understood by all.

The influence of the number of interrelationships requiring attention on the span of managerial control is well illustrated by cases at the lower levels of the management hierarchy. If subordinates perform relatively simple and perhaps identical tasks, there is little need for communication among them or between them and the manager. Thus a foreman of an assembly line operation with a group of subordinates who can be trained easily and whose tasks require little consultation or direction can effectively manage perhaps as many as twenty or twenty-five subordinates. On the other hand, where the tasks of the subordinates are complex, especially in terms of human relationships, where their area of authority is large and important, and where problems of coordination are difficult, as is often the case at higher levels, the frequency and severity of interrelationships are great, and the effective span of management small.

Business dynamics and the complexity of policy formulation. The dynamics of the business enterprise also has an important influence. It is obvious that certain businesses change much more rapidly than others. The rate of such change is of tremendous importance in determining the degree to which policies can be formulated and the stability of formulated policies maintained. It may, indeed, explain the organization structure of companies—railroad, banking, and public utility companies, for example

—operating with wide spans of management, or, on the other hand, the very narrow span of management utilized by General Eisenhower during World War II.

The effect of change on policy formulation and on training possessed by subordinates is perhaps in no place more dramatically shown than in the organization of the Roman Catholic Church. This organization, in terms of durability and effectiveness, can probably be regarded as the most successful in the history of Western civilization. Yet, the levels in the organization are few. In most cases, the bishops report directly to the pope, and the parish priests to the bishops, although in a few instances bishops report to archbishops. There are thus generally only three levels in this world-wide organization and a consequent broad span of management at the top. The fact that this extraordinarily wide span apparently works is due largely to the degree of training possessed by the bishops, plus the even more important fact that the rate of change in the Church is exceedingly small. Changes in procedures or policies are developments of decades, and the fundamental objectives have remained the same over almost two millennia.

Degree to which objective standards are applied. A manager may assure himself either by personal observation or by the utilization of objective standards that subordinates are following company plans. Obviously, where such standards of performance can be used, they can save much of the manager's time. Good objective standards, revealing at a glance any deviations from plans, will enable the manager to avoid many of the most time-consuming relationships and devote his time and attention to exceptions.

Effectiveness of communications techniques. The status of the technology of communications and the effectiveness with which communications techniques are used in a given situation will also influence the span of management. To a great extent, objective standards of control are a kind of communications device. But there are many other techniques by which the manager, in carrying out his functions, may reduce the frequency of relationships between himself and his subordinates.

If every plan, instruction, order, or direction must be communicated by personal contact and every organization change or staffing problem handled orally by the manager, the latter's time will obviously be heavily burdened. Some executives have used "assistant-to" positions or administrative staff personnel, as a communications device in helping to solve the problems of key subordinates and the manager himself. The use of carefully prepared recommendations by subordinates, submitted in written form and summarizing considerations relating to the problem, can frequently expedite the decision-making process. One of the writers has had the experience of seeing busy top executives effectively widen their span of management by insisting upon summary presentation of recommendations in written form, even when these recommendations involved enormously important decisions. If the recommendation is carefully reasoned and presented, the executive can in this way reach a considered decision on a policy matter in minutes, where even the most efficient conference of subordinates would require an hour.

The ability of an executive to communicate plans and instructions clearly and concisely will also increase a manager's span. The subordinate who leaves his superior's desk or receives his memorandum of instructions still in doubt as to what is wanted or what has been said is sure to increase the number of relationships that will sooner or later require the manager's attention. One of the pleasures of being a subordinate is to have a superior who presents his problem, policy, instruction, or decision clearly and concisely. Morale of subordinates may be helped by a manager's easy style, but where this easiness degenerates into confusion and wasted time, the effect is sharply to reduce the effective span of management of the superior and often the morale of subordinates as well. Clarity of instructions, like other communications techniques, may be regarded as an art almost unconsciously practiced, but the efficient manager knows it to be a studied technique.

One can do little more than mention a few examples of communications techniques and how they influence the span of management. Some of these are mechanical, like the telephone, the dictating machine, and the buzzer. But by far the most effective techniques are social, in that they apply to the use of words, analysis, conference, and similar social phenomena. Like any other techniques, they are subject to invention and discovery, so that what may seem to be a limited span for a manager today may be less limited tomorrow.

Time. The span of time is a very real limitation because it cannot be controlled.[8] One may think of time—perhaps the most dynamic element with which managers must contend—as one of the three basic resources available to the manager, the others being human and physical. Except in time of war, when the last man and the last ounce of material are used, it is possible to vary the quantity and quality of human and physical resources. No one, however, can vary the number of minutes in an hour.

The implications of this characteristic of time are profound. If managers learn to live with the clock, they will concentrate on the development of better and more flexible plans and reduce the time lag between planning and execution. For instance, managers can train subordinates to keep open the channels of communication, without allowing them to become cluttered with carelessness, repetition, lack of forethought, babble, or gossip. Managers can also insist upon direct, simultaneous communication of information currently disseminated by successive stages through the organizational hierarchy.

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[8] For an excellent discussion of this point, see C. W. Boyce, "Management Problems in the Factory of Tomorrow," *Transactions of the American Society of Mechanical Engineers,* fall sess., 1953.

Time is fast becoming the strategic factor in enterprise. The rapid development of automation and the prospect of automatically controlled processes imply heavy costs for interruptions of any sort. One of the most important will be the time involved in planning, communication, and decision making.

Limitations of attention. Psychologists have long recognized that the individual human being is subject to a span of attention—the limitation on the number of separate items the human brain can heed at any one time. While such a span of attention, particularly in the kind of intellectual problem the manager contends with, certainly exists and while it affects the number of subordinates he can effectively control, this span may be regarded as a refinement of the span of time.

ARE THERE OTHER SPANS?

In attempting to explain the reasons for limits existing in a manager's ability to manage more than a certain number of subordinates in a given situation, it is sometimes suggested that there are many spans other than that of the span of management.

Spans of personality and energy. Spans of personality and energy are sometimes suggested as factors affecting the number of subordinates who can be effectively managed. The span of personality is regarded as that limitation a manager's personality may have in dealing with and influencing people. The span of energy is thought of as a limitation of the energy, physical and mental, that an executive may be able to apply to his job.

Neither of these spans seems to add much to the problem. The span of personality may be a very real factor in executive success, but to regard it as a basic determinant of departmentation is to confuse executive qualities with limits of more general application. The span of energy is little more than a refinement of the limitation of time. Energy limits are basically time limits. To be sure, one manager may seem to have an inexhaustible supply of energy, and another may tire more quickly and easily. But these characteristics, like those of personality, are essentially personal qualities. Practical men are interested in effective available time, and, of course, time alone would not be important if it were not utilized effectively in terms of energy expended.

The span of knowledge. One reason sometimes suggested for departmentation is that of the manager's span or limitation of knowledge. It is contended that managers create additional departments and place them under subordinate managers to hide the fact that they themselves are not technically qualified to perform their duties. This practice, it is then argued, tends to result in an expansion of the number of subordinates reporting to a manager and increases the difficulties of direction and control.

This argument is fallacious. There are, of course, spans or limitations of knowledge. No one, not even the person who rises from water boy to president of a large company, can be an expert in all things. But a manager *manages*. And to the extent that he does, he does not need to be an expert in all phases of the business.

Conflicts in Efficiency: Spans versus Levels

The limitation upon the number of subordinates a manager may effectively manage helps to explain the existence of levels in organization: the larger an enterprise and the narrower the spans, the more must be the levels created.

Inefficiencies in efficient spans of management. The very necessity for utilizing an organization structure and following authority relationships causes complexity and losses as this structure becomes laden with departments and levels. Experience with large organizations proves to any individual the frustrations of "layering," whereby authority, suggestions, questions, and instructions must flow up and down the chain of command. Not only is this process costly in terms of time, effort, and expense, but it is costly in terms of manager and worker morale. While some problems of "layering" may be solved by understanding that requests for information need not follow the line of command, there is no practical solution for making an organization work unless decision making, where authority is necessarily required and utilized, does follow the chain.

The losses caused by the presence of too many levels are not limited to expenses of supervision and losses of managerial efficiency. There are also losses in morale.[9] Individuals do not like to be regarded as cogs in a machine but want to have a feeling of belonging. Workers and managers at low levels like to hear of management decisions from top management itself. One of the favorite programs of a management club of a large business enterprise has been of exactly that nature—a program at which top management appeared before lower managers, revealed plans, and answered questions. Its popularity resulted, not merely from idle curiosity, but rather from the basic human desire to be on the inside. When levels of organization make subordinate managers (and workers) feel too far away from the top leadership of the business, they are likely to misunderstand plans and policies and, indeed, to lose their desire to understand. Moreover, as one astute student of human relations has pointed out, the lower-level employee, submerged under a long hierarchy of organization levels, has few opportunities to develop a capacity for self-reliance and initiative.[10]

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[9] For an interesting discussion of this point, see W. H. Newman, *Administrative Action* (New York: Prentice-Hall, Inc., 1951), pp. 267–268.

The Sears Roebuck studies. One of the interesting studies of the effect of levels on enterprise efficiency is that made by Sears, Roebuck and Company.[11] Although the management of the company has been prejudiced for a considerable time in favor of short lines of communication and while its organization has long tended to reflect this attitude of Robert E. Wood, president or chairman of the board for many years, there is no evidence that this kind of thinking had been forced on the organization structures of the company's stores, at least until a study of organizational efficiency was undertaken. In the course of this study the operations of two groups of B stores (150 to 175 employees) in towns of approximately the same size were analyzed. In one group the managers had organized their stores with an assistant manager and some thirty merchandise managers in charge of store departments. In another group the stores were organized along more conventional lines, with an extra level of management between the store managers and the department heads. Studies of sales volume, profit, morale, and lower-management competence all indicated that the stores with the "flat" type of organization were superior on all scores to those more conventionally organized.

These results, found in the case of stores clearly violating the traditional limitations of span of management, were traced to several factors. The principal reason appeared to be that managers having a large number of subordinate managers reporting to them had no alternative but to delegate authority to these subordinates, who were thereby placed in a position of important decision making. This action not only improved their morale, but, because of the pressure placed on them to perform, actually improved the quality of their performance. By being forced to manage, they learned to manage. By the same token, the store manager, knowing that he had to delegate considerable authority, took greater care in selecting, guiding, and training his subordinates and also found it necessary to adopt efficient methods of objective control over their performance.

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[10] J. C. Worthy, "Organization Structure and Employee Morale," *American Sociological Review*, vol. 15, pp. 169–179 (April, 1950).

[11] *Ibid.* See also Worthy's articles, "Factors Influencing Employee Morale," *Harvard Business Review*, vol. 28, pp. 65–67 (January, 1950); *Discovering and Evaluating Employee Attitudes, Personnel Series*, No. 113 (New York: American Management Association, 1947); "Democratic Principles in Business Management," *Advanced Management*, March, 1949.

In addition, the Sears study found that reducing the length of channels resulted in vastly improved communication between the store manager and his subordinates, despite the presence of so many subordinate managers.

The growing tendency to disregard span-of-management limitations. As has already been indicated by reference to the study of the American Management Association showing how top executives are expanding the span of management, industry is tending to pay more attention to the inefficiencies of extended levels of organization and less attention to those of the span of management. The International Business Machines Corporation, for example, recently cut one entire level of middle management from its organization and increased the span of management of the remaining executives. As one organization expert has said, "You have a place in which good people can grow rather than stagnate when you discard this traditional idea of span of authority." [12]

This drive to shorten the line of command is a result not only of a realization of the disastrous effects of poor communications but also of the desire on the part of many top managers to force authority down into the organization structure. The shortage, too, of managerial personnel in the middle and top levels of management, occasioned by the war years and the rapid expansion of industry, may have forced this kind of policy on industry.

Spans versus levels: a resolution of forces. There can be no doubt that, despite the Sears Roebuck studies and the tendency to flatten organization structures, the limitations of span of management are real and important restrictions. A manager may have more subordinates than he can effectively manage, even though he delegates authority, trains them well, formulates plans and policies clearly, and adopts efficient control and communications techniques. It is equally true that, as an enterprise grows, the span-of-management limitations force the utilization of successive levels.

What is required, of course, is a careful balancing in a given situation of the inefficiencies of spans against those of levels. Widening spans and reducing levels in an enterprise may well be the most effective course of action; under other circumstances, the reverse may be true. The principle of resolving the forces of inefficiency is clear in concept. It is one of balancing *all* the costs of adopting one course or another, not only the costs in an arithmetic sense, but costs in morale, personal development, and the attainment of enterprise objective. In a military organization, perhaps the attainment of objectives quickly, effectively, and without error would be predominant; in a department-store operation, on the other hand, the long-run objective of profit may be best served by techniques that force initiative and personal development at the lower levels of the organization.

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[12] Burleigh Gardner, formerly employee-relations research director at Western Electric's Hawthorne plant, as quoted in *Business Week*, Aug. 18, 1951.

Selected References

Dale, E., *Planning and Developing the Company Organization Structure*, Research Report 20, pp. 49–60. New York: American Management Association, 1952.

Davis, R. C., *The Influence of the Unit of Supervision and the Span of Control on the Economy of Line Organization Structure*, Bureau of Business Research, Research Monograph 26. Columbus, Ohio: Ohio State University, 1941.

Graicunas, V. A., "Relationship in Organization," in L. Gulick and L. Urwick (eds.), *Papers on the Science of Administration*. New York: Institute of Public Administration, 1937.

Newman, W. H., *Administrative Action*, Chap. 15. New York: Prentice-Hall, Inc., 1951.

Petersen, E., and E. G. Plowman, *Business Organization and Management*, rev. ed., Chap. 4. Homewood, Ill.: Richard D. Irwin, Inc., 1948.

Urwick, L., *Notes on the Theory of Organization*, pp. 53–57. New York: American Management Association, 1952.

Worthy, J. C., "Organization Structure and Employee Morale," *American Sociological Review*, vol. 15, pp. 169–179 (April, 1950).

7

BASIC DEPARTMENTATION

The limitation on the number of subordinates that can be directly managed would clearly restrict the size of enterprises if it were not for the device of departmentation. The device of grouping activities and subordinates into departments makes it possible to expand firms to an indefinite degree. Departments, however, are not all alike but differ with respect to the bases used to determine the specific activities assigned to each. The nature of these bases and the evaluation of their uses are subjects of considerable interest and are dealt with in the following sections.

DEPARTMENTATION BY SIMPLE NUMBERS

Although departmentation by simple numbers, once an important form in the organization of tribes, clans, and armies, is rapidly falling into disuse, it still has certain applications in modern society.

The basis of grouping. The simple-numbers method of departmentizing is achieved by tolling off a number of undifferentiated persons who thenceforth owe their obligation to perform duties under a foreman, a crew leader, a straw boss, or a squad leader. The essential fact is not what these people do, where they work, or what they work with. The important point is that a number of indistinguishable persons are involved.

Extent of use. Departmentation that rests upon simple numbers is, by definition, useful in any undertaking whose success depends upon manpower. In many armies portions of the infantry division are still organized upon the basis of numbers of men. Groundkeepers for municipalities, universities, and large estates are often organized on this basis, as are house-to-house sales crews, collectors for community funds, membership drives, and common labor crews.

Gradual decline of simple-numbers basis. Even though a cursory examination of the way in which many activities are organized may impress an investigator with the number of people actually departmentized on a manpower basis, the usefulness of this organizational device has declined with each passing century. For one thing, labor skills have increased. Enterprises of today need men to operate a machine, use a tool, or exercise some other specialized skill. In America the last stronghold of common labor is in agriculture, and even here it is restricted more and more to the harvesting of fewer and fewer crops.

A second reason for the decline in the use of the manpower basis is found in the relatively new discovery that teamwork is frequently more efficient than mere numbers of people. The reorganization of the defense forces of the United States on this basis is a case in point. Many ways have been found to combine men skilled in the use of different types of weapons into single units. For instance, the addition of artillery and tactical air support to the traditional infantry division makes of it a much more formidable fighting unit than when each was organized separately.

A third and long-standing reason for the decline of departmentation by numbers is that the device is mainly useful at the lower levels of the organization structure. At the middle- and higher-management levels the different activities tend to be grouped on the basis of their intimate association rather than on that of their similarity. As soon as any other factor besides pure manpower becomes important, the simple-numbers basis of departmentation fails to produce good results.

Departmentation by Enterprise Function

The grouping of activities in accordance with the functions of the enterprise is a widely accepted procedure, calling for a careful analysis of this departmentizing device.

Essential logic of functional departmentation. The characteristic action of enterprises embodies what they typically do. Since all undertakings involve the creation of utility for the use of others and since this occurs in an exchange economy, the basic enterprise functions consist of production (creating utility or adding utility to a good or service), selling (finding customers, patients, students, or communicants who will agree to accept the good or service at a price), and financing (raising and collecting, safeguarding, and expending the funds of the enterprise). It has been both natural and logical to group such activities into departments. The result may be found in such typical departments as production, sales, and finance.

Many times these particular terms will not appear in an organization chart. There is, first, no generally accepted terminology. While manufacturing enterprises employ the terms "production," "sales," and "finance," a wholesaler will think of his activities as buying, selling, and finance, and a railroad, as operations, traffic, and finance.

A second reason for variable use of these terms is that sometimes a characteristic activity is vestigial. Hospitals have no selling departments; churches, no production departments. This does not mean that these basic activities are not undertaken but merely that they are unspecialized or are of such minor importance that they are included under other activities.

A third reason for the nonappearance of sales, production, or finance departments on many organization charts is that other methods of departmentation may have been deliberately selected. Departmentizing on a functional basis is, after all, merely one way to organize. Whoever is responsible for the enterprise may decide upon a product, customer, or territorial basis.

Extent of use. Functional departmentation is the most widely employed basis for organizing enterprise activities and is present in almost every enterprise at some level in the organization structure. This does not mean one typically sees functional departmentation employed exclusively, although such is the common practice in small-scale enterprises. It does mean that a functional department, say, finance, may be found beside or above a department based upon product, customer, or territory.

Types of major functional departments. The term "major" may be used to identify departments with large budgets, many employees, or an importance related to the very existence of the enterprise. It is in the last-named sense—the grouping of those activities essential to the continued existence of the firm—that the term is used here. If it is the chief business of an enterprise to engage in research, the research department is a major unit of organization. The actuarial department of an insurance company and the auditing activity of a public accounting firm are similarly major departments.

Major *functional* departments are those including characteristic activities basic to the firm's operations. Since such activities concern the creation of utility in goods or services and the exchange of the latter for purchasing power, the major functional departments of an enterprise will deal with these concerns.

Major and minor functional departments. Among minor functional departments are grouped those activities which, while important to the enterprise, nevertheless, lack the degree of urgency of those that identify major organizational units. Thus, while major and minor functional departments are similar with respect to the characteristic nature of the activities in question, they are dissimilar in the vital quality of importance.

There are several reasons for the subordinate place, at a particular time, of the minor units. The activity may be vestigial, a characteristic that may itself be permanent or temporary. Thus, it is difficult to foresee any change in the status of the treasurer in a debating society, a boy-scout pack, or a ladies' bridge club. In many enterprises during World War II, however, sales departments suddenly sank from major to minor importance because the firms had sold everything on hand to the government.

It is difficult to classify the deliberate selection of other bases for departmentation as either permanent or temporary, but their effect upon the subordination of functional departments is clear. The choice of a customer, territory, or product basis does not eliminate the characteristic nature of functional activities, but it does cause the activity to be divided among customers, territories, or the different product groups. The consequent diffusion of functional activities then leads to the subordination of each where it is carried on, even though the totality of the activities could be grouped into a major department. The process may be likened to the roots of a plant. Each root performs an essential function, but each, regarded singly, is subordinate in that its loss would not endanger the life of the plant. However, when all the roots are grouped together, the combined activities are of major importance.

Derivative functional departments. The characteristic natures of the selling, production, and finance functions of enterprise activity are so widely recognized and thoroughly understood that they are the basis not only of departmental organization but of primary departmentation. The managers of primary activities report to the executive general officer of the enterprise, and the primary level is the first level in the organization structure below the chief executive. The designation does not consider the question of the major or minor nature of the departments or the basis for grouping enterprise activities.[1]

Wherever activities are grouped into major functional departments, they will naturally be located in the organization structure at the primary level, while minor functional departments may be found almost anywhere below the first echelon.

Derivative functional departments are established when the manager of any functional division feels that his span of management is too broad. For instance, when an enterprise is small, the production manager may have only workers reporting to him. With the expansion of activities it may be necessary to split off the buying function and place a purchasing agent in charge. The new purchasing unit is a derivative functional department, and it appears in an organization chart at the second level of the structure if production is a primary division. A typical grouping of functional activities into derivative departments is suggested in Table 2.

There are several points of interest here. First, the titles assigned to activities are not intended to represent standard practice, for none exists. They do, however, conform to rather widespread practice. The suggested departmentation, secondly, does not follow the practice of any single

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[1] W. H. Newman, *Administrative Action* (New York: Prentice-Hall, Inc., 1951), p. 279. Newman thinks of primary departments as major operating divisions while Petersen and Plowman think of primary departments as those based upon territories, commodities, and functions. See E. Petersen and E. G. Plowman, *Business Organization and Management* (rev. ed.; Homewood, Ill.: Richard D. Irwin, Inc., 1948) p. 201

Table 2. Derivative Functional Departments of Typical Organization Structures

Primary functional department	*Derivative functional departments*
MANUFACTURING ORGANIZATION	
Production	Manufacturing:
	Fabrication
	Assembly
	Tooling
	Purchasing
	Production control:
	Scheduling
	Materials control
	Quality control
Sales	Selling:
	Selection
	Training
	Operation
	Advertising
	Sales Promotion
Finance	Capital requirements
	Source of funds
	Fund control
	Disbursements
	Credit
DEPARTMENT-STORE OPERATION	
Publicity	Advertising
	Display
	Publicity
Merchandising	Buying (organized by product line):
	Budgeting
	Merchandise control
	Promotion
	Sales force
General superintendent	Supplies
	Customer service
	Store protection
	Warehousing
	Receiving, marking, delivery
Finance	Financial management:
	Cash control
	Credit
	Accounting
WHOLESALE ORGANIZATION	
Sales	Buying (organized by product line):
	Budgeting
	Merchandise control
	Promotion
	Sales force

[*Continued on next page.*]

Table 2. Derivative Functional Departments of Typical Organization Structures (Cont.)

Primary functional department	*Derivative functional departments*
General superintendent	Warehousing
	Store superintendent:
	Receiving
	Will call
	Shipping
	Stock room
Finance	Money management
	Credit and collections
	Accounting
SERVICE ORGANIZATION (AIRLINE)	
Operations	Engineering:
	New equipment
	Modification of equipment
	Communications engineering
	Maintenance:
	Line maintenance
	Overhaul
	Ground operations:
	Station management
	Food and commissary
	Flight operations:
	Flying
	Communications
	Dispatching
Sales (traffic)	Traffic administration:
	Reservations
	Schedules
	Tariffs
	Sales:
	Passenger sales
	Cargo sales
	Sales promotion
	Advertising:
	Direct mail
	Newspaper and periodical
	Radio and television
Finance	Financial management:
	Cash control
	New financing
	Foreign exchange
	Accounting:
	Revenue
	Disbursements
	General ledger

firm. This qualification is obviously necessary, since the stage of departmentation within an enterprise depends upon the span of management peculiar to each firm. A third point is that some types of enterprises, such as department stores, do not organize all primary functional departments directly into subordinate functional groups. The merchandise manager is in charge of the total buying and selling activity of the store, but the people who report to him are product-line buyers, who, in turn, do organize their activities into derivative functional groups. Some derivative functional departments, finally, are in turn subdivided into a second derivative functional grouping.

Advantages of functional departmentation. The most important advantage in grouping enterprise activities on a functional basis is that the organizer is following a natural, logical, and time-proved method of basic departmentation. In a field of endeavor wherein the practitioner often wonders whether his actions are defensible, the knowledge that a practice is time-honored adds to his sense of security.

The practice of functional departmentation is also the best way of making certain that the power and prestige of the basic activities of the enterprise will be defended by the top managers. This fact is an important consideration among functional managers, for they see on every side the encroachments of staff and service groups, which sometimes threaten the security of the principal line executives.

A third advantage of functional departmentation is that it follows the principle of occupational specialization. By dividing activities in accordance with what is characteristically done, one paves the way for specializing personnel along occupational lines, thereby making for efficiency in the utilization of manpower.

Disadvantages of functional departmentation. In spite of the advantages of functional departmentation, there are times when the claims of other methods will seem even stronger. The size of the geographical area over which an enterprise operates may call for territorial grouping of activities, as the production or purchase of numerous product lines or of products designed for certain buyer classifications may call for grouping along product or customer lines. Secondly, functional departments may include activities in which the department head has neither interest nor knowledge. It would be poor practice to assign such elements to a manager and expect him to maintain a high level of directional efficiency in their regard. And, finally, functional departmentation may tend to de-emphasize the enterprise objectives as a whole. Accountants, production experts, and salesmen, growing up in specialized departments, often have difficulty seeing the business as a whole, and coordination between them is frequently difficult to achieve. What is perhaps most important is that, since the first *general* managerial position is that of the president or the executive vice-president, the functionally organized company is not the best training ground for promotable managerial manpower.

DEPARTMENTATION BY TERRITORY

Departmentizing on the basis of geographical areas is a rather common method for physically dispersed enterprises. The principle upon which this method is based is that all activities that occur in a given area or territory should be grouped and assigned to a manager. From a superficial viewpoint such a rule appears eminently sound.

Use of territorial departmentation. The attractions of territorial departmentation are especially strong in large-scale enterprises or in other enterprises whose activities are physically or geographically spread. A firm may, however, be local in its activities and still assign the guards in a plant protection department on a territorial basis, placing two men, for instance, at each of the south and west gates. Department stores assign floorwalkers on this basis, and it is a common way to group the activities of janitors, window washers, and the like.

Business firms commonly resort to this method when similar operations are undertaken in different geographic areas, as in automobile assembly, chain retailing and wholesaling, and oil refining. Many government agencies—the Federal Reserve Board, the Federal courts, and the Post Office Department, for example—adopt this basis of organization when it is important to provide similar services simultaneously in various sections of the nation.

Reasons for use. It is obviously important for the enterprise considering territorial departmentation to rest its decision on the right reasons. Frequently, however, the wrong reasons are advocated.

The Wrong Reasons. Poor communication facilities are often advanced as a reason for territorial departmentation. At one time, the reason was a good one, and in many parts of the world it still is. But, in general, communication is now so easy that the reason no longer stands. With the telephone, telegraph, and television, one can sometimes reach an associate many miles away more quickly than he can buzz the man in the next office.

The need for taking prompt action in a given area is also cited as a good reason for territorial departmentation. The silent assumption is that the local officer *will* be prompt. But if promptness is what is desired, there is nothing to hinder the distant officer's being as prompt as the local man. For similar reasons the asserted ease of coordination and control on a local basis is not sufficient reason for territorial grouping. Fumbling will give poor results, whether perpetrated by local officers or by central office managers.

Finally, those who advocate the above reasons for area grouping miss the essential point, developed in the next section, that not all the enterprise activities are actually associated on a territorial basis anyway. Concentrating attention only on those which are locally grouped neglects the serious management problems created when different organizational methods are employed simultaneously.

The Right Reasons. Territorial departmentation is proper when the purpose is to avoid absenteeism and when there is a desire to take advantage of certain economies of localized operation. As employed here, absenteeism means that the officers of an enterprise ignore local factors in decision making. Many enterprises, as a matter of policy, practice absenteeism in some or all phases of their activities. On the other hand, the managers of many firms, with great or little fanfare, denounce absenteeism and do their very best to avoid it. They have several reasons for this attitude.

The firm that endeavors to make allowances for local elements in a situation will find many opportunities to do so. Firms which can tie in their product with such local phenomena as fishing facilities, skiing opportunities, sun bathing, and even the occurrence of smog can use local appeals in their advertising. Sometimes it is important to place orders for supplies on a local basis, as when managers of chain retail stores are allowed to tie in with local business enterprises for construction, supplies, and services.

Sales managers tend to look with favor upon the local recruitment of salesmen. Already familiar with area factors others would have to learn, such men would not be required to uproot their families and could be presumed to know best how to deal with area customers. Men recruited elsewhere may be better men, but they will require more time to make adjustments to local factors.

Although the great improvements in communication have tended to eradicate differences in custom, style, and preferences for product variations, many enterprises still consider these factors to be important enough to treat on a local basis. Such apparently small items as language differences or weather sometimes can influence vitally the success of a distribution program. And there is a closely related issue here. If it is enterprise policy to heed local factors, territorial departmentation provides the area with a manager who has the prestige essential for getting results. Middle- and high-level managers may not be too ready to listen to the bleat of a distant salesman, but they will listen to the representations of a district or regional executive. They may even act promptly.

The economic reasons for selecting the territorial method of departmentation relate to the cost of getting things done. Plants for the manufacture and assembly of parts may be located so as to reduce transportation costs. The proper location of warehouse facilities will reduce the time required for delivery, an element that may seriously affect booking the order in the first place. Any arrangement of the salesmen's routes that reduces traveling during his best hours for sales will likewise reduce the expense of distribution.

The district, region, or branch has long been recognized as an excellent training ground for managers. It is a device made to order for giving them essential experience at a place in the organization structure and at a time in their careers that are most valuable to them and least risky for the firm. This is not to say that a firm should necessarily organize territorially in order to permit subordinate managers to gain essential experience. But it is an important factor to consider in deciding upon the type of departmentation.

Application in functional areas. The reasons for departmentizing on a territorial basis do not apply with equal force to all the enterprise activities. Neither are they applicable at the same organization levels within the affected departments. The place and the point in an organization structure at which the strength of these reasons overpowers other considerations are so highly variable that there are few rules to guide the organizer.

An extreme view of territorial departmentation envisages the grouping on this basis of all enterprise functions. The Eastern division of a firm would then be composed of the production, sales, and finance functions essential to carrying on enterprise activity in that region, while the Western and Southern divisions would likewise be complete operating units, with nothing whatever to hold them together. They would be wholly independent of one another and of any "headquarters" activity set up to serve them. No known enterprise exists on such a basis, although the public-utility holding company in recent times and the international trading companies of the fifteenth and sixteenth centuries did approach it.

Each of the three primary functional areas of enterprise activity may now be analyzed from the point of view of the proper reasons for regional grouping. In the production department, the proposal for organizing on a regional basis would mean the establishing of plants, to be engaged in manufacturing, mining, refining, or assembling the *same* product, in various areas. It is conceivable that by catering to local factors, the production activity would gain certain advantages: the good will produced by providing jobs for local labor, for instance. But the gains would be mostly economic: lower freight rates, lower rent, and lower labor costs. Thus, the chief reasons for establishing production activity on a territorial basis would be economic ones.

Those who would territorialize the organization of sales activity may point to the advantages of attending to local preferences and local pride, the economic gains to be made, and the early opportunity granted its men to acquire managerial experience. No general rule may be developed because the various advantages carry different weights with every firm. Some enterprises make a product that must be sold by sales engineers who appeal to customers on the basis of operating economy. Others make a product such as electric lighting fixtures, the sale of which is affected by quality or terms rather than local preferences. Each enterprise will find it necessary to assess for itself the net influence upon sales of grouping activities on an area basis.

The reasons for area departmentation apply with little or no force to the finance function of enterprise. The development of sources of funds, their care, disbursement, investment, property management, record keeping, and controls—typical activities of a finance department—reflect no gains from catering to local factors. On the other hand, the economies of centralization of these activities are so pronounced that all enterprises strive for them.

Neither is a general rule applicable to the level within the department at which the reasons for territorializing should be considered. Decisions depend upon the facts in each case. It would be purely a coincidence if both the sales and the production activities would reap net advantages from area grouping at the same levels in each division. Similarly, the likelihood that all derivative functional departments would themselves be departmentized on an area basis is extremely remote. This question will be considered later.

Derivative territorial departments. The subdepartmentation of an area activity into smaller area groupings is a common practice. Indeed, some enterprises utilize the territorial basis for establishing several orders of derivative departments of the same type. The railroad companies are typical. The large-scale firms subdivide operations into regions, and these are successively subdepartmentized into such derivative forms as divisions, districts, and sections. Similarly, the sales function of large-scale firms may be subdepartmentized into regional groups and from these are derived subordinate area departments such as districts and branches. A similar result is achieved by subdividing a region into state, county, and township derivatives.

The span of management is an important cause for such procedures. The grouping of activities on an area basis may mean the establishing of a thousand districts, the managers of which cannot report directly to the general sales manager. Since his span of management may be limited to eight or ten subordinates, the general sales manager would have to have the thousand managers report to about a hundred superiors at the branch level, who would in turn report to ten or so regional managers. Three territorial levels within the sales department would thus be established.

The net gain from territorial departmentation. The area basis of grouping activities is attractive for three fundamental reasons. First, there may be gains, even above immediate efficiency, to be achieved by catering to the good will of local people. Secondly, there may be advantages of lower cost in territorial dispersal of operations, and they may offset any increases in the cost of coordination and control at headquarters. Thirdly, territorial departmentation provides excellent opportunities to create numerous managerial positions at levels where the firm can afford to permit employees to gain experience. Many minor supervisory positions are also available when other bases of departmentation are chosen, but few give the breadth of experience a branch or district manager receives.

Departmentation by Product

The grouping of enterprise activities on the basis of products or product lines is a method that is widely followed in diverse social units. An analysis of this practice will permit the consideration, at a later point, of its proper usage.

The use of product departmentation. Business, government, and other social enterprises make considerable use of the product basis of grouping activities. Department stores and bulk oil stations receive their names from their devotion to it, and manufacturers, wholesalers, retailers, and the operators of service firms employ it widely, as do government corporations and such agencies and divisions as the United States Forest Service and Department of Agriculture. Other types of social units probably employ product departmentation in less degree, but social clubs, relief enterprises, universities, and religious groups have found certain applications very useful.

Reasons for product departmentation. Product or product line is an important basis for departmentizing because it permits the maximum use of personal skills and specialized knowledge, facilitates the employment of specialized capital, and makes easier a certain type of coordination. Economists have demonstrated the advantages of the division of labor and capital. Similarly, the broadening of knowledge makes it necessary for employees to narrow the field of their skills and knowledge. For instance, the sales effort of a particular man may be most effective when confined to a product line such as lubricants, or conveyers, or power plants, each of which is best sold by the expert thoroughly familiar with his product. Where the potential volume of business is high enough to employ fully such a salesman, the advantages of product departmentation are significant.

This basis of grouping activities also permits, although not exclusively, the employment of specialized capital goods. If the conditions of the market are such and the production of an individual item large enough that reasonably full employment of facilities may be anticipated, there is strong pressure for product departmentation to take advantage of the fact that the use of buildings and equipment tailored to the manipulation of a product provides the most economical method of manufacture, assembly, or handling.

If it is important for the activities that relate to a particular product to be grouped together in order to facilitate coordination, then the product basis of departmentizing may be preferred. The activities may be better timed, and better customer service can sometimes be provided. A firm that produces many products may manufacture one of them in a specialized plant. If the sales effort also emanates from the plant, cooperation between production and sales may be exceptionally good. Other factors that may tend to reduce this advantage will be considered presently.

Finally, there is a managerial advantage that can be very important. In an attempt to gain the economic advantages of specialization, engineers, for instance, are frequently divided into departments devoted to pure research, design, and application (sometimes called production engineering). The men in these sections, however, are not only very narrow in their viewpoints, but their supervisor is likely to be equally narrow, with little appreciation of the problems in other sections. Many firms, therefore, organize in terms of projects (temporary product departmentation), wherein all types of skill are required. Similarly, in department-store operations activities can be rearranged so that the section manager, rather than being confined to selling one or a few related items, will be also responsible for buying, credit, selection of personnel, and other functions.

Employment in functional areas. The product basis of departmentizing is employed in all the functional areas of enterprise activity. But it is most prominent in the production function, as in the use in supermarkets of grocery, produce, and meat departments. Such well-known grouping as Buick, Cadillac, Chevrolet, and other divisions of General Motors rests upon the product basis. The buyers who report to the merchandise manager of a department store are known by their product lines. University deans are distinguished by the subject matter that is taught in their colleges. Hospitals departmentize on the basis of such services as surgery, and relief enterprises include such product departments as food, clothing, shelter, and medical care.

It is rather typical for the sales managers of enterprises that manufacture numerous items to group them on the basis of their similarity. Wholesalers do the same thing. The organization of a linen department, a period-furniture grouping, the departmentizing of electronic products in terms of condensers, contacts, switches, tubes, and similar items are all examples. The departmental structure in these cases permits the men who sell the goods to gain a broad and deep product knowledge. A commercial bank, too, is quite likely to subdepartmentize its loan activities into commercial, industrial, and personal, and its investment activities into securities, real estate, and trusts, though it is rare to find product departmentation of the finance function in a manufacturing, wholesaling, or retailing type of business, or in government, a university, or the Red Cross, where the advantage of centralized functional control outweighs all other considerations.

Product-department derivatives. Regardless of the level at which the first product department is located within the organization structure, a problem that will be considered later, it is not uncommon to continue subdepartmentation at least one step further on the same basis. When the first derivative is concerned with a plural product, two or more second-derivative product departments may be expected, and from that point the manager will subdepartmentize on a functional, territorial, customer, or other basis. For instance, in the sales department illustrated in Table 3 the manager of the processed food section will normally find it desirable to subdepartmentize on a product basis, thus developing second-derivative product groups. A comparable move is unlikely in the dried milk derivative of the dairy or the poultry department of the meat packer.

Limitations of product departmentation. This method of grouping activities encounters certain difficulties in coordination and may lead to instability of the organization structure. Where the production department is organized in this way, there is a strong tendency to force a similar grouping in sales, buying, shipping, accounting, and credit control, since it is difficult otherwise to synchronize the latter activities with those relating to product classes. This often provides ambitious production managers with a good argument for having all related activities transferred to them. They would thus gain in power to the point where they would rival the president. Firms like General Motors, which have transferred such power to division heads, have also introduced safeguards in the form of a general staff and centralization of the finance and major policy determination.

Table 3. Derivative Product Departments of Typical Organization Structures

Primary product department	*Derivative product departments*
A MEAT PACKER (PRODUCTION DEPARTMENT)	
Dairy and poultry	Butter, cheese, hatcheries, ice cream, eggs, poultry, dried milk
Beef, lamb and veal	Calf buying, cattle buying, lamb buying, hides and skins, wool
Branch-house provision (functional department)	Casing, hog buying
By-products	Hides and fats, cleanser, gelatin, glue, industrial oils, soap and glycerine, tallow
Plant food	Insecticides and fungicides, phosphate rock
Agricultural research	Canned foods, margarine, table-ready meats, vegetable oil buying, dog and cat food
A CONTAINER MANUFACTURER (SALES DEPARTMENT)	
Food industries	Processed food, prepared food, coffee and tumbler, dairy
Drug and chemical	Pharmaceutical and proprietary, household and chemical, prescription
Closure and plastics	
Beverage industries	Beverage, brewery, liquor
AN INSURANCE COMPANY (FINANCE DEPARTMENT)	
Investment (a functional derivative)	Mortgages, private placements, public utility, transportation, industrial, government

CUSTOMER DEPARTMENTATION

The grouping of activities in a way to reflect the paramount interest of the firm in the customer is commonly found in different types of social units. The customer may be said to be the key to the way activities are grouped when all the things a firm does for him are under the management of one department head. The industrial sales department of a wholesaler who also sells to retailers is a case in point.

But there really are close decisions to be made in separating some types of customer departments from product departments. For instance, in the great central cash markets for agricultural products the commercial banks frequently specialize their loan officers in terms of fruit, vegetables, and grain. Indeed, sometimes the specialization narrows to the point that a person will make loans only on wheat or oranges. The question of whether these departments are organized on the basis of customer or on that of product is sometimes difficult to answer.

Use of customer departmentation. Customer departmentation may be found in various types of social units. Businessmen frequently arrange activities on this basis to cater to the requirements of clearly defined customer groups, and educational institutions will divide activities between regular and extension services or employ age groups as the distinguishing feature of departmentation.

Reasons for customer departmentation. The unique and widely varied needs of customers for clearly defined service impel managers to departmentize on this basis. The manufacturer who sells to both wholesalers and to industrial buyers frequently finds that the needs of the two outlets can best be met by specialized salesmen. The first outlet requires him to produce a product of dependable quality, available on a continuous reorder basis, and suited to the requirements of the ultimate consumer. The industrial buyer is interested in a product that will save money. This situation frequently calls for high quality, plus a service that includes survey of needs, installation, specific training of employees in the operation or use of the product, repair, and replacement service.

Producers also feel that they can best cultivate sales among customers if the latter are classified on such bases as appeals, ages, or incomes. Department-store operators commonly departmentize into such grouping as children's, women's, and men's shoes. And they have bargain basements to appeal to low-income groups.

Nonbusiness groups follow similar practices. The extension work of universities is arranged, with respect to time, subject matter, and sometimes instructors, to appeal to an entirely different group of students from those who attend on a full-time day basis. The operations of a Community Chest drive are also arranged on the basis of different "customer" classifications. And many departments of the Federal government are set up to care particularly for farms, businessmen, laborers, and others.

Employment in functional departments. Customer departmentation is often found to be a useful basis for grouping the sales activity of those who cater to classes of customers who have different needs. For instance, it is not unusual for a manufacturer with only an industrial market to divide his customers into large and small accounts. On the other hand, manufacturers do not develop derivative customer departments in their production function. A manufacturer of typewriters does not specialize his production facilities in terms of university students and insurance-company customers. And even though he were to group separately the activities involved in manufacturing a standard versus an electric typewriter, the resulting departmentation would be accomplished on a product and not on a customer basis.

Independent wholesalers and retailers typically combine their sales and production function and then subdepartmentize them productwise. Sometimes, however, they will organize customer departments. For instance, department stores often carry similar merchandise in their bargain basement and on an upper floor, organizing the two departments under two buyers. This is customer departmentation, since it assumes that different income groups patronize the two areas. Wholesalers such as mill supply houses are beginning to organize their buying-selling activities under two specialized buyers, who cater to the needs of industrial customers and retail stores respectively.

The finance departments of manufacturers, wholesalers, and retailers have no need for grouping activities on such a basis, since they are operated with a view toward the enterprise welfare rather than to the needs of customers.

Derivatives of customer departments. As in the case of product departmentation, there are no derivatives of customer departments where the original classification does not combine two or more customer groups. There may be a need for subdepartmentizing a plural classification into further customer refinements, but the singular arrangement is most likely to be subdepartmentized on a functional basis.

The dangers in customer departmentation. The advantage of customer departmentation of services tailored to customer needs is not enjoyed without certain drawbacks. There is, for instance, the difficulty of achieving a high measure of coordination between this type of department and those organized on other bases, with constant pressure from the managers of customer departments for special treatment of customers.

A second danger relates to the possibility of underemployment of facilities and manpower that are specialized in terms of customer groups. In periods of recession some customer groups may all but disappear, *e.g.*, machine-tool manufacturers, and in periods of expansion the unequal development of customer groups is characteristic.

PROCESS OR EQUIPMENT DEPARTMENTATION

The grouping of enterprise activities about a process or a type of equipment is often employed by manufacturing establishments, especially at the lowest levels of organization. Such a basis of departmentation is illustrated in a paint or electrolytic-process grouping or in the arrangement in one area of punch presses or automatic screw machines. Manpower and materials are brought together in such a department in order to carry out a particular operation.

The purpose of grouping activities on such a basis is to achieve certain economic advantages. This arrangement of processing operations is frequently required by the nature of the equipment involved. For instance, the electrolytic process requires heavy specialized capital, since it is not possible to utilize economically small units of this apparatus. In the case of equipment departments the preference for this arrangement is purely a matter of economy and convenience. The machines themselves may very well be placed with respect to other equipment in such a way that a series of operations on material is feasible. But where there is a large volume of single (or a few) operations to be performed on material, which then may be sent to stock room or sold to customers, specialized supervision and the full employment of setup men and operators offer definite economies of production.

EVALUATION OF ALTERNATIVES IN SELECTING A TYPE OF DEPARTMENTATION

Departmentation is not an end in itself but is simply a method of arranging enterprise activities to facilitate the accomplishment of the ultimate objective. It is not even an unmixed good, for the separation of activities on any basis creates issues of coordination difficult to solve. Each of these methods has its advantages and disadvantages. Consequently, the process of selection involves a consideration of the relative gains from the employment of each type at each level in the organization structure. In all cases the central question concerns the type of coordination that the manager wishes to achieve.

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Primary departmentation. The primary grouping of activities occurs at the level immediately below the general executive officer of an enterprise. At this level the claims of the functional basis of departmentation are especially strong. This method of associating activities most closely conforms to what every enterprise essentially does, and it permits the coordination by one person of each of the basic functions. With all production activity under the care of one person, and sales under that of another, the chief general officer can concentrate on the coordination of staff and service departments with the three functional areas without himself being involved in the internal affairs of production, sales, and finance.

Many enterprises, for a number of reasons, have established primary departmentation on some other basis. There may have been pressure from a powerful product department head, or some special reason for developing a market in a particular customer classification; again, such organization may be temporary, pending the discovery and development of a good functional manager. Aberrations from the general practice are usually difficult to justify. On the other hand, there should be no hesitancy in employing some other basis if a legitimate case can be made for it.

Although there may be occasions when the functional sales and production departments will not be utilized at the primary level, there are almost never circumstances which justify a similar abandonment of the functional finance department. Indeed, the finance division occupies a unique place in enterprise. It is *the* activity which holds the firm together and its authority, therefore, at the primary level must be centralized.

Intermediate departmentation. The term "intermediate departmentation" includes all the grouped activities that appear in the organization structure between the primary departments at the top of the hierarchy and those departments which exist at or near the bottom of the structure. It is in the choice of bases for departmentation at such levels that managers find decision making most difficult. There are no general rules. It is certain, however, that below the primary functional departmentation the claims of most of the other methods of grouping activities become more insistent. And it is also certain that at secondary and lower levels these claims may best be satisfied.

In the production function the claims of the product basis for recognition exert heavy pressure at the secondary level whenever there is marked diversity of products or of product lines or a geographic dispersion of operations. The functional production manager of a firm manufacturing electronic items normally will establish product-line departments to fit the product groups he makes. But if only condensers were made, no product departmentation would take place. Consideration might then be given to the claims for territorial departmentation at the secondary level.

Sometimes it is possible to secure most of the advantages of two or more methods at the same level, as when the establishment of a secondary-level product department would permit a firm to locate the plant at the geographical site where it can also reap the economies of territorial departmentation.

The functional sales manager is faced with the strong claims of territorial departments for recognition at the secondary level. This is true even of firms that narrowly confine their distribution. Department stores open branches to serve city territories more effectively; salesmen's territories are commonly established even within cities. Where the product basis has strong appeal, the coordination of activities is greatly facilitated if this method of grouping is used at the secondary level. For a similar reason customer departmentation is likely to occur at the secondary level if it is employed at all.

Table 4, representing alternative practices that may logically be found at various levels of the organization structure, contains a convenient summary of the permissible variations in the choice of bases for departmentation.

There is no virtue in attempting to maintain a mechanistic parallelism in the bases of departmentation. While particularly strong claims of functional departmentation may result in functional grouping at the primary level, the secondary level in a sales department may be composed of a territorial or customer grouping, the production department may have a product classification, and the finance department may utilize derivative

Table 4. Types of Departmentation at Various Levels of the Organization Structure

Functional department	*Structural levels*				
	1	*2*	*3*	*4*	*5*
Production....	F	F	E or F		
	F	P	F	F	
	F	P	P	F	
	F	T	F		
	F	C	F	F	
Sales.........	F	F	F		
	F	T	T	F	
	F	T	T	C	F
	F	C	T	T	F
	F	P	T	T	F
Finance.......	F	F			
	F	P	F		

Key: F, functional; T, territorial, P, product; C, customer; E, equipment, process.

functional groupings. It is on the ground of net advantage to the functional department executive, and not that of parallelism, that the basis is selected.

Ultimate departmentation. Ultimate departmentation is departmentation at the lowest level of the organizational structure. It has no qualitative connotation and includes all departments that appear at this level, quite without reference to the bases of their arrangement. In production divisions such departments are ordinarily headed by foremen; in sales divisions of manufacturing enterprises the manager at the lowest level may be called a district or branch manager or supervisor; and in the finance division, and indeed, in all office-type activity, such terms as head, chief, and supervisor may be used to designate the comparable manager.

A review of Table 4 points up the fact that at the lowest level of the organizational hierarchy the basis for departmentation is almost invariably functional. This occurrence is no mere accident, since the activities undertaken here are concerned with getting out the product or service, selling and servicing customers, and taking care of the raising, safeguarding, and expenditure of funds—all typically functional activities.

The Mixing of Departmentation

In the section dealing with the evaluation of the alternative methods of departmentizing two points were made. The first was that each method yields certain gains in coordination but that these, in every case, were reduced by the disadvantages encountered in coordinating a given department with all others. The second was that the achievement of parallelism in the intermediate departmentation of the functional divisions is not a proper organizational objective.

There is a third point that may be high-lighted also, concerning the mixing of departments within a functional area. For instance, a wholesale drug firm has grouped the buying and selling activities relating to beverages in one product department but has grouped, on the same level, all other selling activities on a territorial basis. A manufacturer of plastic goods has territorialized both the production and sale of all of its products except dinnerware, which is a product department. A functional department manager may, in other words, employ two or more bases for grouping activities on the same organizational levels. Such practices may be justified on logical grounds. The objective of departmentation is not to draw a pretty picture, balanced in terms of levels and characterized by parallelism and identity of bases. The purpose is to group activities in the manner which will best contribute to achieving the enterprise objective. If variety of bases does this, there is no reason why any manager should be limited in the number of alternatives before him.

Selected References

Davis, R. C., *The Fundamentals of Top Management,* Chap. 10. New York: Harper & Brothers, 1951.

Gulick, L., and L. Urwick (eds.), *Papers on the Science of Administration,* Chaps. 1, 2. New York: Institute of Public Administration, 1937.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control,* Part B, Secs. 1, 2. New York: McGraw-Hill Book Company, Inc., 1951.

Newman, W. H., *Administrative Action,* Chaps. 8, 16, 17. New York: Prentice-Hall, Inc., 1951.

Petersen, E., and E. G. Plowman, *Business Organization and Management,* Chaps. 7, 9. Homewood, Ill.: Richard D. Irwin, Inc., 1949.

Sorrell, L. C., *Traffic World,* vol. 46, nos. 24–26; vol. 47, nos. 2, 4 (1930–1931).

8

THE ASSIGNMENT OF ACTIVITIES

In the preceding chapter two problems were considered in some detail. On the one hand, the alternative methods of grouping activities were analyzed. And, on the other, the factors that influence a manager's decision to utilize one or more of the several bases of departmentation were evaluated. For such an approach the economist's term "macrocosmic" may be appropriate. The broad view was adhered to throughout because the manager's concern with securing the right kind of departmentation was recognized.

But the type of departmentation is only part of the problem, for, regardless of the types that exist in an organization structure, the manager must still decide where to assign a new activity or where to shift an old one. The principles of basic departmentation do not solve such problems as to whether customer claims, traffic, shipping, or warehousing should be assigned to a given functional department or whether they should be associated with a customer, territorial, or product type of department. To get at such issues, a "microcosmic" approach is essential.

THE PROBLEM OF ASSIGNING ACTIVITIES[1]

There are three fundamental issues involved in the problem of assigning activities to a particular department. First is the need to recognize a function. Clearly, the organizer needs to identify an activity in order to place it into its proper niche. But how is this done? For the answer to this question a method of analysis is required.

The recognition of functions. One approach the manager may use is to view the enterprise in terms of the skills possessed by its employees. This procedure would result in a count of the number of people having an identifiable skill. *e.g.*, thirteen chemists, eleven process engineers, or thirty typists. Enumerating skills, however, while useful for some purposes, would be of no more help than merely counting people in locating an activity within the organization structure.

Apparently, since the issue concerns the assignment of activities, it is best to analyze directly what people do. An activity, indeed, may be defined in terms of what people do that is essential to the realization of the enterprise objective. There are three levels from which such actions may be viewed. The first concerns an analysis of enterprise activity in terms of production, sales, and finance. The second is comprised of what the people in the enterprise are doing. For instance, if they were asked, the answers would be "adjusting claims," "receiving and shipping," "buying supplies," "operating a truck," "copy writing," and so forth. The third level is the job-analysis approach, wherein the important question is: What do you do when you carry on your job?

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[1] The original systematic examination of the issues involved in assigning activities was made by L. C. Sorrell, "Organization of Industrial Traffic Activities," *Traffic World*, vol. 46 (Nov. 20, 1930).

The issues involved in the assignment of activities are concerned with the second level. To know what functions to recognize, one may proceed along inductive lines, observing what people are doing in a large number of enterprises and classifying the results under such headings as calling on customers, delivering orders, negotiating with finance houses, buying raw materials, or assembling parts. On the basis of the generality of such activities one may conclude that these are the proper functions to recognize. This method would yield valid conclusions if it were assumed that what people are doing contributes to the achievement of their objectives and if all enterprises were engaged in the same activities.

But the investigator may also start with an exact definition of the enterprise purpose and deduce that its realization depends upon the creation of utility in goods or services and the exchange of the latter for purchasing power. He can then enumerate the activities that make a net positive contribution to the production, sales, and finance functions. For instance, in the case of the production of goods or services the derivative activities logically fall under such heads as acquiring the factors of production, production control, and the manufacturing operation. Each of these may in turn be analyzed in the same way. The deductive method has two important virtues. It provides a classification system that omits nothing, and it guards against the inclusion of activities unrelated to the enterprise purpose. But a total reliance need not be placed upon it: conclusions reached by this procedure can always be checked against direct observation.

The second procedure is considerably superior to the first. It can be applied to the organization problems of a new enterprise, and, for the firm that is already organized, it will prove useful, whether the purpose is an audit of the enterprise structure or the determination of the need for a proposed activity.

Need for combining functions. The second fundamental issue in the problem of assigning activities concerns the necessity for combining the recognized functions. As was seen in Chapter 7, the coordination of numerous activities can best be achieved by grouping them into basic and derivative departments.

Need for principles of association. The third issue in the problem of assigning activities, and the one with which the following material is concerned, involves the methods by which activities are combined. It is one thing to recognize the function of receiving shipments. It is quite another to know where to locate it in the departmental structure. The principles useful in this respect are the principle of similar functions and the principles of intimate association.

ASSIGNMENT BY SIMILARITY OF FUNCTION

The practice of grouping together those activities that are similar is both apparent and logical. Not only is it one of the most widely utilized methods of assignment, but its wide usage emphasizes the need for understanding the principles upon which it rests and the advantages of their application.

Basis for recognizing similarity. The search for a basis of classifying activities that leads to the association of those that are similar eventually brings the organizer to the skills of people. At first, he may be persuaded that the important element is the object to which labor is applied. But that which results from labor depends upon the various skills applied to it. Determining what needs to be done and then what skills are required, the organizer can then group them under such heads as typing, chemical analysis, process engineering, and accounting. In such a way people who perform similar functions can be grouped in one department and advantages of occupational specialization can be gained.

Applications of the principle of similarity. Several illustrations of this procedure may be cited. Research engineers, salesmen, file clerks, and machine schedulers are commonly grouped in a research and development department, sales department, general office, and production control department, respectively. Sometimes it is also convenient to group the people who operate similar equipment or who undertake the assembly of a product.

Business, the defense forces, a public works project, universities, churches, and charitable enterprises all find in the principle of similarity a convenient method of combining some of their activities. However, the fact that all similar activities are not combined suggests there must be some limitations in practice.

Limitations of the principle of similarity of function. It is apparent that the principle of similarity is most frequently used in combining activities at the lower levels of the organization structure—those of punch press operators, salesmen, janitors, and clerks—activities quite different from the widely varied ones for which a major department head is responsible.

Many firms, however, get along without a general office. Typists and file clerks may be assigned separately in the several departments. Process engineers work best, not when they are grouped together, but when they are assigned to production departments. Even common laborers are not typically grouped in one division but are assigned to work with people who have different functions. Thus, diversity as well as similarity of function is an important principle in grouping activities.

Principles of Intimate Association

The association of activities merely on the ground that they are diverse would, of course, be foolish. The diversity must be of a particular kind, and there must be very good reasons for using it as a basis for grouping. Such reasons are found in the principles of intimate association, wherein diverse activities are so closely related in the achievement of departmental purposes that they may be carried out most effectively when the people involved are grouped in one organizational unit.

Principle of most use. This principle suggests that an activity for which a given manager has the most use should normally be assigned to him. Such functions as traffic, engineering, and shipping are often located variously in the sales and production departments. In manufacturing establishments the traffic function, which includes such activities as the purchase of transportation services, the use of equipment for transporting materials to the plant, in-plant movement of materials, and warehousing, is often assigned to the production manager. Since his department uses traffic services much more than do others, one may assume he would make certain that the function is accomplished efficiently. However, other departments are not thereby deprived of the transport service, for the production manager can operate the traffic activity for the benefit of other departments as well as his own.

The assignment of engineering may also be determined in accordance with the principle of most use, depending upon the particular emphasis a firm usually gives to this activity. In some enterprises, where the basic need is to fit a product to customer requirements, there is strong pressure to assign engineering to the sales department. But where the engineering problems are most closely associated with production, they may be assigned in the latter division.

Shipping may be similarly analyzed. Perhaps the sales department is most sensitive to the efficiency with which this function is undertaken. Such matters as meeting delivery dates, rush handling, and carrying out packing and handling instructions so that the products arrive in good shape are especially important in the sale of commodities distributed through retailers. Where, on the other hand, the product is made to customer specification, is destined for industrial users, or is largely undifferentiated, the shipping activity is likely to be assigned to the production department. The firms that manufacture heavy equipment, refine oil, or produce lumber look upon such activity as a natural extension of the manufacturing process.

Principle of executive interest. An activity may be assigned to a particular manager, too, if he is especially interested in it and has the capacity to direct it intelligently. In university circles a particular course may be proposed by a member of the staff because, in his view, there exists a basic need for it. If the course is approved, the dean will usually assign it to its sponsor, on the assumption that he has the most interest in seeing that it is well taught.

In the early stages of their growth, business firms often operate without directly undertaking certain ancillary activities, either paying no attention to marketing research, product planning, economic forecasting, budgetary control, and similar activities or else employing outside consultants to handle them. As the firm grows in size, becomes more conscious of its future, and faces competitors alert to innovation and technological developments, influential managers may be expected to urge expansion of the firm's activities in order to take advantage of new knowledge. Such activities ordinarily will be assigned to the manager who was chiefly interested in promoting them.

Or again, there may be a recognized need for a marketing research activity. The sales manager may not know what such a function can do for him, or his limited knowledge of research might make it difficult for him to manage the function efficiently. The president could then attach the activity to one of his own staff groups. Such an action may violate the principle of most use, but it might be better than not undertaking the activity at all or, alternatively, changing sales managers.

In many manufacturing and service enterprises, necessary real estate activities are usually assigned to the general counsel's office. A large manufacturing company may have many real estate leases and a fair number of real estate sales and purchases. These are often not important enough to justify establishing a separate functional department; on the other hand, they do not logically belong in any particular department. The problem is solved by assigning them to that executive who can handle them best—most likely, because of the extensive legal and contractual work involved, the chief legal officer.

Principle of competition. There are many situations in which a particularly desired activity does not flourish because such a development is feared by certain executives, because its possibilities are not recognized, or because it fails to receive vigorous direction. The cure for a wilting activity is often application of the principle of competition. For instance, American universities attempted, in the early 1920s, to meet the growing demand for instruction in the subject matter of business by offering a few courses like corporation finance, marketing, and accounting in the department of economics. Since there were few economists with much interest in or knowledge of the subject matter, there was definite hostility against such instruction. But the demand for it was insistent and was met only by splitting off the business area from economics and establishing a competitive department. Since then, the departments of business administration have not only achieved equal stature but have surpassed the parent department in numbers of students, support by business firms, and budget.

It is still quite a common practice for business firms to direct almost their entire attention to the domestic market. True, inquiries from foreign sources are answered, and unsolicited orders may be shipped. Often, when foreign interest persists, a clerk is placed in charge of the activity. But he has no voice, no influence with the sales manager or even the packing engineer, and very little budget. But there comes a time when foreign sales are regarded as important to a firm. It may then be decided that sales abroad require the attention of a separate manager free to fight for a larger budget, for favorable attention from the production department, and for respect in the shipping department. In other words, he is, organizationally speaking, placed on a parity with the manager of domestic sales and is expected to compete with the latter in contributing to the profitable operation of the total enterprise.

The principle of encouraging competition between departments, divisions, and other units of the organizational structure has an interesting correlative value. It enables the firm to make comparisons that greatly aid in control. For instance, in the above example, similar measures of efficiency can be applied to the domestic and foreign sales departments. From such records as cost of sales, gross profit per net sales dollar, and sales per dollar of effort, the president is able to discover a great deal about the relative efficiency of the two managers.

Principle of suppressed competition. As its title implies, this principle is the exact reverse of the one that encourages competition, and, naturally, it is applicable under a different set of conditions. As the advantages to be reaped from competition become more and more fully realized, the president of the firm may feel a growing need for greater coordination between two functions, for more cooperation and less competition. To achieve this end, he need only change the place in the organization structure where the two activities are coordinated.

For instance, in the previous example of the starved foreign sales department the cure was found by having both the domestic and the foreign sales managers report directly to the president. This procedure may have worked out very well—so well, in fact, that no further discriminatory development would appear to be justified. At this point, the principle of suppressed competition would become applicable. The two sales departments would now have to be reorganized on a functional rather than on a territorial basis. To achieve this end, the heads of each sales department could report to a new officer, a vice-president in charge of marketing, who would report to the president, with the result that coordination would now be achieved on the level of the marketing executive rather than on that of the president.

Principle of policy control. Policies, which are the broad guides to the thinking of managers, vary considerably with respect to their interpretation by the several executives. Some general statements, such as a resolve to compete on a price basis, a determination not to advertise on Sunday, and the intention never to sue a customer, rarely run into differences of managerial opinion as far as administration is concerned. But other policies, such as those relating to credit, customer claims, and returned goods suffer from a lack of exactitude in drafting. This defect permits variations of interpretation, depending upon which person is assigned their management. In such instances, it is important that the activity be undertaken by that manager who would best reflect the intention of the group that originally adopted the policy.

The customer claims activity of department stores, for example, is generally recognized as necessary and important. The typical policy relating to this activity is one of fairness to the store and to the customer. But the very vagueness of what fair dealing is makes possible sincere but widely different attitudes, depending upon the manager making the decision. If the activity is assigned directly to the merchandising manager, his interpretations may favor the customers because of his desire to keep their good will and continued patronage. Furthermore, he is in a position to shift any blame for the cost of the activity to particular department buyers. If the activity is placed in the several departments, however, the buyers will be torn between pleasing the customer and taking the blame for buying the product in the first place, and there will be as many interpretations of policy as there are buyers. The accounting department, finally, might administer the activity on a coldly factual basis that would alienate both customers and department buyers. All these alternatives have been tried in independent department-store operations. Since no choice could be made without endangering the original policy, there is currently a growing practice to assign the activity to the general superintendent, the official in charge of the store building, receiving and delivery, warehousing, and safety. The store executives feel that this manager is in the best position to execute the claims policy in the way it was originally designed.

The administration of credit policy also causes considerable difficulty because of the impossibility of establishing objective rules for time purchases. Credit managers rightly insist that every such rule needs to be interpreted on an individual basis. But to whom should a credit manager report? A sales manager would prefer a liberal interpretation in order to facilitate selling. A production manager would obviously have no particular interest or skill in directing the credit activity. It is likewise beyond the proper scope of accounting. Credit really belongs in the treasurer's department because of its vital effect upon the needs for working capital and the safety of the enterprise.

Another illustration concerns the proper assignment of claims in a railroad enterprise. The fact that this activity has been variously assigned to the traffic, operating, accounting, and legal departments is evidence, not only of experimentation, but also of active competition between the several department managers to secure jurisdiction in the matter. The head of the traffic department may argue that the way in which claims are handled affects the good will of patrons and that claims should therefore be assigned to him. The operating manager may ask for the activity on the ground that his department is responsible for the fact that claims arise in the first place. But the operating department may be too severe with patrons who have damage claims, an attitude that would adversely affect good will. The legal department manager, finally, may urge that settling claims in a liberal manner is one way of giving a rebate, possibly unlawfully, and that he should have the assignment. This battle usually has been settled in favor of the legal department, a development that might suggest that railway presidents are more afraid of going to jail than of losing business!

The important point is that activities be assigned to that manager who will interpret policy in a way satisfactory to those drafting it. It is their *intention* which needs to be reflected in policy applications. So important are the virtues of accuracy and consistency that the employment of the principle of policy control often can be vital to enterprise welfare.

Principle of the clean break. Those who face organizational issues sometimes encounter difficulties in separating activities that could logically be placed in different departments but are, for some conflicting practical reason, best undertaken together. In a sense, this is a perennial problem that arises the moment an enterprise is organized. While the one-man operation is particularly efficient for coordination of activities and while there may be little loss in this effectiveness so long as activities can be broadly grouped into functional classifications, the organizer always runs into a few tough problems in assigning activities that normally would be located in separate divisions but are yet managed best by a single official.

Students of independent department-store operations are frequently surprised to learn that a department manager, called the buyer, is responsible for *both* purchasing and selling merchandise. The assignment of both activities to the buyer results from the close relationship of sales volume to what is bought, and when one manager is assigned both activities, it is easy to fix responsibility for results. On the other hand, the chain type of department-store operation largely separates the two, partly because the chain enterprise is not engaged in fashion merchandising and because it soon runs into the limitations of the span of management.

The assignment of the traffic activity in a manufacturing establishment also illustrates the principle of the clean break. As is very well known, the production department is interested in receiving and on-plant transport, while the sales department is particularly insistent upon prompt shipments to customers. Both departments use the same equipment in the interests of economy. The organizer faces the issue of assigning the activity to production or to sales or to a separate traffic department. In practice all three solutions are used, with the first and last alternatives the more successful. But the success is due, not to the department that is selected, but rather to the fact that divided control is not permitted.

These illustrations serve to emphasize the fact that arbitrary decisions to divide control over an activity are impractical. They result in unworkable assignments of parts of functions to several managers. If for any reason the activities in question refuse to break clean even though their nature may make it appear logical to do so, the appropriate principle is to avoid forceful separation. In a sense the clean-break principle is one of "no clean break"!

Principle of coordination. The coordination of enterprise activities involves two factors. The things to be done need to be properly timed, and the effort to be placed behind each activity must be integrated. Thus, if advertising effort is to be coordinated with personal selling, it ought to be timed so as to help the salesmen most, and the amount of effort placed behind each activity should be integrated so that the marginal expenditure upon each will produce the same volume of sales.

The principle of coordination involves the question of where, *in the organization structure*, given activities should be integrated. If everyone in a firm reports to the president, it is clear that all coordination takes place at his level. If the managers of sales, advertising, sales promotion, and research report to the chief marketing executive, all selling activities will be coordinated at the first level of the organization structure. The old-fashioned foreman used to coordinate production, hiring, promotion, wage determination, firing, and maintenance; such activities are now coordinated at the level of the production executive. In American railroad organization, operation and traffic functions are normally coordinated in the person of the president, while the British combine these functions in the managers responsible for freight and passenger departments.

The organization structure, therefore, plays a vital part in achieving the coordination of activities. Once the organizer decides where coordination of a particular function is to be achieved, there is no trouble in modifying the organization structure accordingly. But the reasons for preferring that coordination take place at a particular point are another matter entirely. They may be found in the personal idiosyncrasies of the executives, in social demands for speed, convenience, or taste, in a desire to exact a particular kind of responsibility from a given manager, or in the determination to make a new policy work. Whatever the occasion, the principle of coordination will dictate the method of assigning activities that will give the desired results.

However, since all organization has an objective of coordination, the *principle* of coordination, as one of the principles of intimate association, must be carefully distinguished. It involves the grouping of activities in such a way as to obtain coordination at a *point* in the organization structure where such coordination would not otherwise exist.

Principle of separation. The successful operation of enterprises of all types requires that certain activities be undertaken purely as a check upon the effectiveness and propriety with which functions are carried out. It is the job of the organizer to assign such activities to a particular manager. Clearly, it is not enough to assign them on the basis of most interest, lest the very purpose of their creation be jeopardized. They must rather be carried out by a manager independent of the executive whose work is being evaluated.

Manufacturing firms, for example, commonly provide for the inspection of purchased materials and goods in various stages of production in order to see that those who are responsible for purchasing and manufacturing are achieving quality specifications. The inspection activity will obviously be subverted if the personnel of that department are responsible to the purchasing agent or the plant superintendent. Such an event could not occur if the activities of the chief inspector were at least coördinate with those of the purchasing agent and the superintendent.

Similar issues are involved in the employment of an outside auditor and in the separation of accounting from the finance function. The certification of financial records could hardly be made by a subordinate in the treasurer's department. And since the accounting activities are useful checks upon the treasurer, who has control of the enterprise funds, they might be quite harmless indeed if the chief accountant reported to the treasurer, or vice versa.

The principle of separation provides a valuable and invariable rule for assigning activities that are designed to check upon other functions. The organizer is always on firm ground when he applies this principle, both at the time that a new activity is created and when he carries out an audit of the organization structure.

Principle of functional interest.[2] The principle of functional interest, although it does not have the general applicability of other guides, is an efficient rule in grouping activities that are closely related in terms of purpose. For instance, a publicity manager may have assigned to him such functions as institutional advertising and publicity. These are functionally related because both concern the impact on the general public of the firm, its policies, practices, and personnel. This is an important matter, particularly to large-scale firms, which want to be sure that all outside communication reflects consistency and good taste. Practically all large firms, as a result, not only require that executives clear their speeches with the publicity department but often supply publicity personnel to write them!

Principle of adequate attention. The managers who have thought carefully about organization problems will be quick to realize that special attention needs to be given to certain activities. Sometimes these activities may be tucked away in one department or another for excellent reasons and yet their performance is disappointing. The reason is, of course, that departmental executives, attending to those functions that are of major importance *to them,* are likely, in the process, to overlook an activity that may be of great importance to the total enterprise. Examples may be drawn from the public relations activity when it is located in the advertising department, merchandising when it is allocated to engineering or production, or a suggestion system when it is located in a sales, engineering, or accounting department.

All such illustrations are characterized by two factors. They are activities that have significant potential for good when properly carried out. And they inevitably wither away without adequate attention. Under such circumstances the organizer may decide there is a need for divorcing the activity from its current location. Many times the activity can be shifted to another department. For instance, the industrial engineers may be the group to give proper attention to the suggestion system. Merchandising, on the other hand, is highly complex, involving as it does the selection of product or product line and the determination of quality, market, packaging, production, and shipping characteristics, and its assignment to any single person might destroy the activity. The most successful solution, therefore, has been the allocation of merchandising to a specially created committee. A frequent solution to the problem of breathing life into public relations, on the other hand, is to create a separate department for it. Only then does it seem to get the kind of attention that is required to make it an effective activity.

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[2] Related, in some respects, to this concept is the category of "common objective" in W. H. Newman, *Administrative Action* (New York: Prentice-Hall, Inc., 1951), p. 136.

Application of the Principles of Association

The application of the principles of association of activities actually presents many problems to the organizer. They cannot be followed like directions for assembling a radio because they present alternatives, the selection and use of which require good judgment. But a conscientious effort to follow the principles has its own reward in good management practice, and many executive problems are simplified, if not eliminated, by a proper assignment of activities.

The alternatives of similarity and intimate association. Perhaps the first problem which the organizer will face is that of the choice between the principles of similarity and of intimate association. The important advantage of the similarity principle lies in the economies of supervision and of equipment use.

The principles of intimate association, on the other hand, permit the realization of the advantages of the task-force method of grouping different but closely related activities. Its employment is mandatory at the top echelon of the structure but becomes less of a necessity in middle and lower levels.

Evaluation of principles in specific cases.[3] There is much to be said for the view that if an objective is clearly understood the selection of the way to achieve it is made easy. This view is particularly apropos in the organizing function, since the kind of coordination activities receive depends largely upon where they are assigned.

In allocating activities, the organizer experiences pressure from two directions. The external forces arise from the desire, and even the insistence, on the part of other managers to have certain functions assigned to a particular department. Their purpose may derive from a tendency to build empires, from a conviction that the assignment they suggest is appropriate, or from a desire to head a new department. The internal pressures arise from the several principles themselves, each calling for recognition in particular situations. However, in many situations two or three principles may point to the same conclusion, a helpful factor lending assurance to the decisions made.

Conflict in principles. One of the difficulties in applying principles of association is that some of them are in open conflict. This does not mean that any individual principle is wrong but that there are circumstances in the life and growth of enterprise when some principles are clearly inappropriate. Small firms may have great difficulty in applying the principle of similarity because they cannot realize economies of specialization. No firm, moreover, could apply the principles of encouraging and discouraging competition at the same time for the same activity. Consequently, in the application of principles, the organizer has the duty to keep in mind the stage of growth and the size of the enterprise, on the one hand, and the purpose to be achieved, on the other.

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[3] For an excellent discussion of this topic as applied to the traffic and shipping and receiving activities, see L. C. Sorrell, *Traffic World,* vol. 47, nos. 6–8.

Jurisdictional disputes. All enterprises experience more or less disagreement among managers in connection with the assignment of given activities. Few top managers have not been present at discussions about assigning engineering to production, credit to accounting, public relations to personnel, or receiving to purchasing. These and similar issues consume hours of the time of expensive personnel, and unfortunately most of the discussion is futile because it is not about the *right issues*. Circumstances of this nature open wide the door for aiding friends, hurting colleagues, or grabbing power.

The principles of association are sharp weapons to use in these controversies. Attention to them avoids the overtones of personal bases for decision making and focuses attention upon both the purpose to be achieved and the selection of the appropriate principle to reach it. In such circumstances few jurisdictional disputes will be permitted to cause more than a ripple of concern. This does not mean that the nonlogical motivations of employees can be ignored. But it does mean that outlets for them need to be sought in directions that do not interfere with the essential wisdom of assigning an activity to a particular place in the organizational structure.

The right to change the assignment of activities. An assignment, once made, does not carry with it the sacrifice of all rights to make a subsequent change. In fact, just the opposite is true. The organizer makes the best assignment possible under the circumstances. He puts the allocation into effect with the view of letting it rest until future developments raise the question again. Enterprises, even the most static, are forever changing their overtones of emphasis, and consequently their organization structures are likely to burst at the seams unless pressure is relieved by reallocating activities. It is the certitude of this eventuality that requires a reservation of the right to shift assigned activities in the manner dictated by purpose, time, and circumstance.

In view of these inevitable changes it is important to realize that no person acquires a vested interest in any activity. First things come first. In enterprise those things that are first are the objective to be realized and the activities that facilitate its achievement. If their accomplishment can be furthered by a shift in the assignment of a function, managers are quite within their rights to undertake the change.

Quality of organizational activity. The degree to which the principles of association are appropriately applied at a given time is an index of the quality of organization. The correctness of the principle and the good judgment with which it is applied inevitably lead to good organization structure. It is, unquestionably, a fruitful way to facilitate good management.

The logic of this situation points directly to the fact that audits of the organizational structure may be made directly. The consultant need not waste time inferring the existence of structural defects from the identification of their results. He is in a position, as is any manager, to evaluate directly the skill with which the enterprise is structured by referring to the application that was made of the principles of association.

Selected References

Newman, W. H., *Administrative Action*, pp. 131–143. New York: Prentice-Hall, Inc., 1951.

Petersen, E., and E. G. Plowman, *Business Organization and Management*, rev. ed., Chap. 9. Homewood, Ill.: Richard D. Irwin, Inc., 1948.

Simon, H. A., *Public Administration*, Chap. 7. New York: Alfred A. Knopf, Inc., 1950.

Sorrell, L. C., "Organization of Industrial Traffic Activities," *Traffic World*, vol. 46, no. 25; vol. 47, nos. 6–8 (1930–1931).

W. White Psychology of Handling People

9

LINE AND STAFF AUTHORITY RELATIONSHIPS

The reason for departmentation and the principles of assigning activities to departments have been discussed. We must now consider the third essential organization question: How is authority allocated within the structure? This question in turn has two facets. One has to do with the nature of authority relationships in an enterprise; the other with the extent to which authority is concentrated or dispersed. The former problem is one of the authority relationships of line and staff; the latter is one of centralization of authority.

Without the coordinated allocation of authority to department heads throughout the enterprise the various departments cannot be brought into a smooth-working team properly harmonized to the accomplishment of enterprise objectives. Thus the authority relationships between managers and those between managers and subordinates become essential to effective organization. Whether looked upon in their perpendicular or in their horizontal sense, they are the factors that breathe life into an organization, harness departmentized groups of activities, and bring coordination to the enterprise.

The Line and Staff Concept

Much confusion has arisen both in the literature and in management practice as to what is line and staff, a confusion that can easily be eliminated by reference to the basic nature of authority and its use in organization. Wherever there is line authority, one finds a superior and a subordinate. As Mooney so aptly recognizes,[1] this gradation of authority is found in all organization as an uninterrupted scale or series of steps. Hence this arrangement, hierarchical in nature, may be referred to as the scalar principle in organization. The essence of this principle is that in any organization there must be a series of superior-subordinate authority relationships from the top of the organization to every position in the structure. In some cases, these steps are long and complicated, as in many large enterprises, but even in the simplest the very act of organization brings into play the scalar principle.

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[1] J. D. Mooney, *Principles of Organization* (New York: Harper & Brothers, 1947), pp. 14–15.

The nature of line and staff relationships. The nature of line authority becomes apparent from the scalar principle. It is that kind of relationship in which a superior exercises direct command over a subordinate. It is thus an authority relationship in direct line or steps.

Staff is likewise a relationship but is advisory in nature. As Mooney has stated, staff is auxiliary in nature, and while "it may suggest that the structure of organization is like a double-track railroad, consisting of line and staff as two coordinate functions . . . there could be no more erroneous conception." [2] For, as he points out: [3]

> The structure of organization is single track only, and can never be anything else. What is known in military organization as line is synonymous with what we have called the scalar chain, and there can be but one chain of line authority. Any duty in organization that cannot be identified as an actual link in the scalar process is an auxiliary function, adhering to the line like sidings along the main track. This means that every staff function must adhere to the line in some dependent relation, and could not otherwise exist. If we find in staff organization a counterpart of the same scalar gradations that appear in the line, this is implicit in the fact of its adherence. It must of necessity follow the gradations of that to which it adheres.

Line and staff: relationship or departmentation? There is a tendency to regard line and staff as types of departments. While it is true that certain departments may stand in a predominantly line or staff position with respect to other departments, line and staff are authority relationships and not groupings of activities. It is true that the public relations department of a business, for example, being primarily advisory to the top executives, may be thought of as a staff department. But within the department one will find line relationships. The director of public relations will stand in a line authority position with respect to his immediate subordinates.

Likewise, the vice-president in charge of production is regarded as having a line department, since he usually stands in a scalar relationship to the organization as a whole. His job is not primarily advisory to the chief executive officer, but as a subordinate he has been delegated authority to supervise a major segment of the chief executive's duties. On the other hand, when the vice-president sits with other top officers to counsel the chief executive on over-all company policy, his relationship becomes one of staff. Furthermore, within the production department there may be many subordinates and a number of departments which will have an advisory role and which will, therefore, have a staff relationship to that department.

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[2] Mooney, *op. cit.*, pp. 34–35.

[3] *Ibid.*, p. 35.

It is true that, when one looks at an organization structure *as a whole*, the general character of line and staff relationships for the total organization emerges. Certain departments are predominantly staff in their relationship to the entire organization. Other departments are primarily line. Figure 3, for example, portrays the skeletal organization of a manufacturing company.

In the organization of this company, the activities of the director of research and the director of public relations are likely to be primarily advisory to the main stream of corporate operations and are consequently referred to as staff departments. Likewise, the finance, production, and sales departments have activities generally related to the main corporate functions in a hierarchical, or line, sense, with direct delegations of authority and supervisory relationships leading to the ultimate accomplishment of enterprise purpose through handling money, the creation of goods, and the sale of goods. They are consequently referred to as line departments.

These staff department heads, however, have line authority over their subordinates, and the line department heads may at times advise their superiors in the organization. While it is often convenient, and true, to refer to one department as a line department and another as a staff department, it is likewise true that the grouping of activities does not give these various departments such characteristics. Line and staff are characterizations of authority relationships and not departmental activities. Should research be one of the principal functions of the company, as is usually the case in aircraft manufacturing where the engineering departments are producing ideas for sale to military and commercial customers, a research department will stand in a line relationship to the organization as a whole and take on the characteristics of a factory department in a typical manufacturing enterprise.

Line and staff: specialization of managerial functions? Although recognizing the inherent nature of line and staff as one of authority relationships, many students of management have attempted to distinguish between them on grounds that they represent a specialization of managerial functions. Some express the distinction by asserting that it is the line executive's function to *act* and the staff executive's function to *think*.[4]

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[4] L. Gulick, "The Theory of Organization," in L. Gulick and L. Urwick (eds.), *Papers on the Science of Administration* (New York: Institute of Public Administration, 1937), p. 31. Gulick observes that "when the work of the government is subjected to the dichotomy of 'line' and 'staff' there are included in staff all those persons who devote their time exclusively to the knowing, thinking, and planning functions, and in the line all of the remainder who are, thus, chiefly concerned with the doing functions. . . . Obviously those in the line are also thinking and planning, and making suggestions to superior officers. They cannot operate otherwise. But this does not make them staff officers. Those also in the staff are *doing*

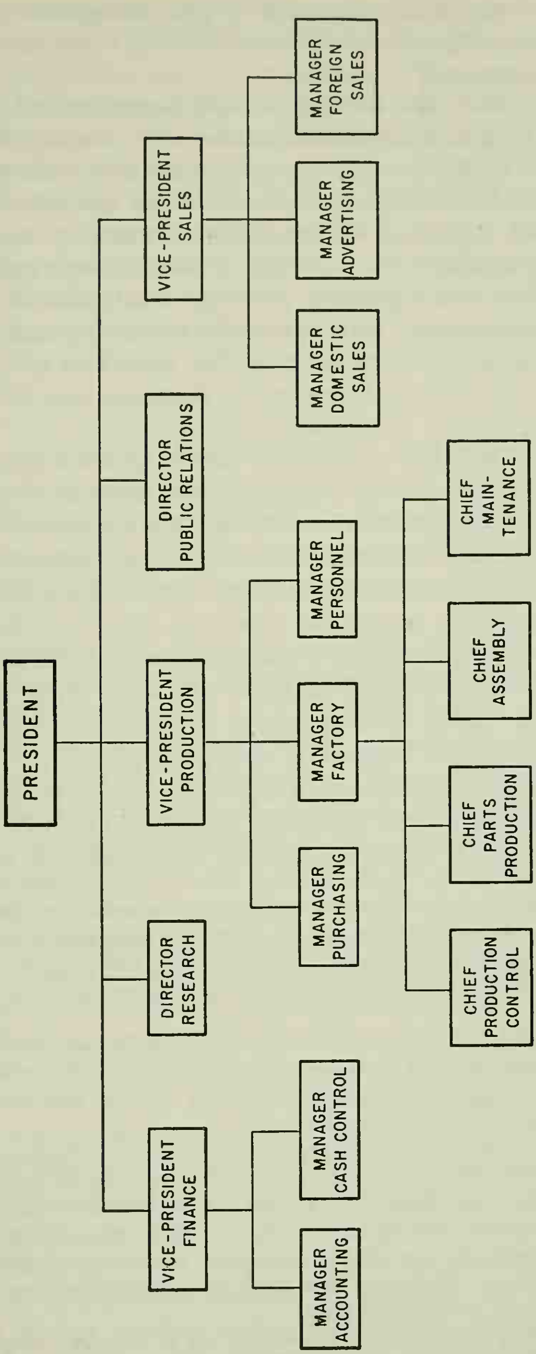
PRESIDENT
VICE-PRESIDENT FINANCE
DIRECTOR RESEARCH
VICE-PRESIDENT PRODUCTION
DIRECTOR PUBLIC RELATIONS
VICE-PRESIDENT SALES
MANAGER ACCOUNTING
MANAGER CASH CONTROL
MANAGER PURCHASING
MANAGER FACTORY
MANAGER PERSONNEL
MANAGER DOMESTIC SALES
MANAGER ADVERTISING
MANAGER FOREIGN SALES
CHIEF PRODUCTION CONTROL
CHIEF PARTS PRODUCTION
CHIEF ASSEMBLY
CHIEF MAIN-TENANCE

Fig. 3. Line and staff organization of a typical manufacturing company.

Akin to this concept is that advanced by two management scholars that staff officers are assigned an "authority of ideas" and line officers the "authority to command." [5]

This tendency to explain the distinction between line and staff in terms of a division of the managerial functions may possibly be traced to Frederick W. Taylor's attempt to separate planning from performance. It will be recalled that Taylor, in his quest for specialization of functions, enunciated a principle of functional foremanship, through which he advocated specializing the functions of foremen into eight groupings and these, in turn, into a planning level and a performance level.[6] That this principle has never had wide application in industry and has not been regarded as workable is not surprising, for, as will be noted presently, it involves the subdivision of managerial functions, the division of the indivisible.

This confusion over line and staff has been heightened by the tendency to regard them as a division of managerial functions. It is apparent from the literature of management and often even more apparent in actual line and staff operations in industry, the military, government, and other organizations.[7] The fact is that no manager can manage unless he has the authority to engage in managerial functions. One who does not plan, organize, direct, staff, and control can hardly coordinate and prosecute the activities for which he has been given authority. While the degree to which he may be called upon to engage in these several functions may vary, their possession is inherent in managership.

Nevertheless, this does not mean that staff officers do not assist line officers in carrying out their managerial functions. One sees staff officers specializing in planning assistance. But staff officers likewise assist in other

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something; they do not merely sit and twiddle their thumbs. But they do not organize others, they do not direct or appoint personnel, they do not issue commands, they do not take responsibility for the job. Everything they suggest is referred up, not down, and is carried out, if at all, on the responsibility and under the direction of a line officer."

[5] E. Petersen and E. G. Plowman, *Business Organization and Management* (rev. ed.; Homewood, Ill.: Richard D. Irwin, Inc., 1948), p. 259. A similar idea is expressed by Mooney (*op. cit.*, p. 34), who notes that "the line represents the authority of *man;* the staff, the authority of *ideas.*"

[6] F. W. Taylor, *Shop Management* (New York: Harper & Brothers, 1911), p. 99. Taylor believed that efficiency would be gained if the job of the shop foreman were subdivided into the following activities and duties: (1) order of work and routing, (2) instruction, (3) time and cost, (4) gang boss, (5) speed boss, (6) repair boss, (7) inspector, and (8) disciplinarian. He thus distinguished planning and performance levels, placing the first three functions on the planning level and the remainder on the performance level.

[7] For an interesting summary of this problem, see L. Urwick, "Organization as a Technical Problem," in Gulick and Urwick, *op. cit.*, pp. 57–59.

managerial functions. On every hand, one can see departments engaged actively in planning, in attacking organizational problems, in making assignments of production orders to machines, in drawing up instructions or commands for the use of their superiors, and in staffing a line executive's subordinate positions. But, to the extent that these activities are staff, they are so, not because they represent planning instead of performance, but because they represent counsel and advice.

Importance of understanding line and staff. In view of the confusion that has arisen in practice about line and staff, the distinction is sometimes assumed to be meaningless. It is argued that these are obsolete terms, carried into industry from military organization, and that in modern firms the lines have become so obliterated by new organizational devices that they no longer have any meaning.

The distinction seems important, however, as a way of organizational life. The superior and the subordinate alike must know whether he is acting in a staff or a line capacity. If acting in a staff relationship, one must realize that his job is to advise and not command, that his task is to sell and not tell, and that his line superior must assume the responsibility for making the decisions and issuing the instructions through the scalar chain below him.

A case at point is that of a competent young auditor, who had unusual industrial experience as controller and internal auditor of several large business enterprises and who was hired by the executive vice-president of an expanding company as his assistant. The assistant's charge was clear—to bring to the attention of the executive vice-president means and places for reducing costs of operations, expending scarce capital wisely, and expanding in an orderly fashion. But some uncertainty existed in his mind, or that of his superior, as to whether he was limited to a staff position or whether he had line authority from the executive vice-president to see that these things were done. In any event, he gathered a large organization of statisticians, production efficiency experts, planners, economists, budgetary control personnel, and organization specialists. With their help the assistant readily discovered numerous places where costs could be reduced, production and service improved, management bettered, and money most efficiently expended. The accuracy of the findings was extraordinarily high; yet the entire program failed, and the executive vice-president was forced to abandon it. The reason was simple. His assistant had not understood that he was to act in a staff capacity, that he could not force his findings and policy determinations on unwilling line executives but must instead sell his ideas to them. The line executives resented the intrusion of this staff officer, as well they might, since he was in effect stripping from them their power to manage. The result was not only complete lack of cooperation by the line officers but an insistence that the control department be abolished. Faced with a choice between supporting the chief line lieutenants and supporting a staff officer who had not confined his activities to investigation and recommendation, the executive vice-president could choose only in favor of the line.

Many other examples could be given of the importance of understanding line and staff relationships. Not only must the staff executive recognize that his job is to counsel, but the line executive must realize that, when receiving such advice, it must be regarded as advice, and not command. Authority to manage must rest with the executive who stands in a line relationship with his subordinates. Failure to understand these relationships is probably the greatest single cause for friction in an organization.

The Development of the Staff Concept

The staff concept is probably as old as organization itself. Since organization almost certainly grew first in political and military spheres of social existence, one might expect to find the first traces of staff in those areas. Mooney, in studying the field, found a pure staff function in the boule of the government of Athens, whose function it was to prepare measures for the consideration of the ecclesia,[8] and similar evidence of the staff principle in the organization of the Roman Republic, an example being the early Roman senate, or council of elders, which later changed from having a pure staff function to exercising a line function. From the age of feudalism to the present, the importance of staff counsel has ever been recognized, even though the emphasis of early organization was clearly on the development of line relationships.

Applications of the staff principle in the Catholic Church. Mooney finds the staff principle to be one of the "most notable lessons" furnished by the long history of Catholic Church organization, where staff service has taken forms unknown in other areas. The most obvious case of staff relationships is in the central administration of the Church, consisting of two major institutions, the sacred college and the Roman Curia. It should be noted that, during the entire history of these two institutions, they have been regarded as advisory to the Holy Father, who delegates none of his authority to them and has no obligation to adopt the advice given.

One of the institutionalized organization principles of the Catholic Church has been described by Mooney as "compulsory staff service." This principle operates to force the superior to listen to his subordinates. While the line decision rests with the superior, he cannot refuse to listen. This principle, at least as old as the Rule of St. Benedict, promulgated in the sixth century, required the abbot of a Benedictine monastery to consult the elder monks, even on minor matters. Once applicable only to the Benedictines, the principle is now applied throughout the Church.

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[8] For his excellent description of organization in antiquity, see Mooney, *op. cit.*, Chap. 7. Chaps. 8–20 include other pertinent material; Chaps. 14, 17, and 18 deal with the development of staff. Much of the material presented here has been drawn from Mooney.

Another interesting staff principle is referred to by Mooney as the principle of "staff independence." In Catholic organization it is often the practice for staff advisers to be independent of superiors with respect to both tenure and position. Advice is thus unweakened by the fact of dependence. As Mooney so well reflects on the lack of this in military, civic, and business organization: "The weakness of many forms of staff service is that the counselor is dependent on the man whom he counsels, and hence is subject to the danger of sinking to the level of a 'yes' man." [9]

The army general staff. Although the staff principle can hardly be called a military invention, the terms "line" and "staff" appear to have had their origin in military organization. The modern concept of the army general staff is usually traced to the seventeenth century, when emphasis was placed upon a top staff of experts by Gustavus Adolphus of Sweden. The Mark of Brandenburg is given credit for the evolution of the general staff organizations of the Prussian and German armies. The Prussian general staff, as organized by Scharnhorst in the early nineteenth century, was a completely organized advisory service coordinated under a single head, the chief of staff. Interestingly enough, Scharnhorst saw the dangers of separation of line and staff personnel and required that all staff officers periodically return to line duty and line officers be given staff assignments.

This principle of rotation was overlooked in the organization of the French general staff of the nineteenth century, with the result that the line neither understood nor paid attention to the counsel of the staff. The tradition of counsel and the acceptance of staff, so well formulated by Scharnhorst and developed by such successors as Clausewitz and von Moltke, were the precursors of the German staff of World Wars I and II. These devices have been copied and improved upon by all great military machines of the present day.

The reason for the efficiency of staff in the military organization of modern times is not difficult to understand. A general commanding a large number of men does not have the mental or physical capacity to develop all the information needed for a sound decision. Moreover, lesser commanders of a division, battalion, or regiment face, to some extent, similar problems. It is not surprising, therefore, that the general-staff principle has been carried down into lower echelons.

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[9] *Ibid.*, p. 122.

The importance of effective staff work was brought forcefully to the attention of the United States Army as the result of the Spanish-American War. Men were ordered to Cuba without adequate planning for the types of arms and equipment and armament needed, without adequate intelligence information as to the type and armament of the foe to be met, and without other requirements of a well-planned and coordinated attack. Because of a lack of staff planning, men were sent to a tropical climate in woolen uniforms, ships transporting the forces had little information as to the depth of channels and the nature of harbors, and little was known of the proper routes to take upon landing.

As a result of this experience and the brilliant report of Elihu Root in 1902,[10] the American army adopted the general-staff principle that, with normal developments, is the basis of its organization today. Root's report is a classic on the need for staff service, pointing to the need for a general staff with no other duties than gathering information, presenting alternative plans, and preparing the details of selected plans.

The use of staffs in business. The development of the staff principle in business can probably be traced to the use of assistants to handle some of the detail of a managerial job, to furnish information needed for decision, and to offer advice and assistance in laying out plans. The separation of planning and performance, recommended by Frederick W. Taylor and his disciples, gave impetus to staff organization in business, even though Taylor's objective was not staff assistance as such but rather the functional specialization of management.

Widespread use of staff agencies in American business developed only in the twentieth century, particularly after the Great Depression of the years 1929 to 1932. The emphasis on planning and control, with their requirements for information, the growing complexities of labor relations, the expansion of government regulations, and the difficult legal and accounting problems arising from tax legislation are factors that argued for staff assistance. Since that time, the development has been accelerated by the growth of large business, in which the problems of management tend to approach those of any army and require specialized information of a breadth and complexity unknown to smaller operations.

The proliferation of staffs in business takes many forms. Few indeed are the top managers who do not have staff assistants in law, taxes, accounting, and perhaps research. Top executives of large companies add staffs dealing with public relations, personnel, engineering, or budgets. The device of staff assistants is so widely used that it is not infrequent for a sales or production manager to have from one to a dozen. In large-scale enterprises, for example, it would not be unusual for the sales managers to have staff men separately assigned to such activities as the selection and training of salesmen, sales strategy, research, quotas, budgets, traffic, and warehousing. Moreover, in some large companies, one finds cases reminiscent of the army general staff. In the General Motors Corporation, for example, an executive vice-president heads a general staff of twelve key managers, each in charge of a staff group devoted to such important activities as distribution, engineering, styling, personnel, and public relations.

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[10] *Report of the Secretary of War* (Washington: Government Printing Office, 1902).

At the same time, many corporation presidents studiously avoid having many staff assistants or staff departments, choosing instead to have staff men report to the managers in the major line departments. Their purpose is to place the staff assistance at the point in the line where it can be most effectively utilized and to avoid undermining the line officers by concentrating staff assistance at the top level. Furthermore, many of the staff agencies, as will be explained below, are not really staff in nature, but have been given a line of authority over certain activities in other departments.

Staff Authority

The basic nature of staff as an advisory relationship amply characterizes the nature of staff authority. Although the staff officer may exercise line authority over the subordinate in *his* department, to the extent that his position is purely staff he has no other line authority. The information he furnishes or the plans he recommends flow upward to his superior. If they are to be transformed into line action, it is the function of the line superior so to decide.

Thus, the assistant to the president of a corporation may be a staff official with the duty of recommending policy and procedure. The fact that the president normally accepts these recommendations and puts them into effect may make the assistant's recommendations bear exceptional weight. But if he is to follow the lines of authority that are inherent in his staff position, he will never allow the line subordinates of the president to act directly on his recommendations without the specific approval of the president. The flow of staff authority is, then, upward to the president, who subsequently exercises line authority in putting recommendations into effect. This flow of authority may be seen in Figure 4.

Should the assistant to the president of the above company, after study of a problem of product line, recommend to the president that the company undertake the manufacture of a new item, the flow of staff authority would be upward to the president. If this recommendation were accepted and a decision made in accordance with it, either by the president or the board of directors, the president, as a line officer, would then issue appropriate instructions to his three line subordinates. Likewise, as may be seen by reference to Figure 4, if the personnel manager and the budget manager were in a position of staff to the vice-president for manufacturing and if this official asked for recommendations on personnel requirements and budgetary needs for the new venture, their staff assistance would flow upward to the vice-president. Adopting the recommendations, he would, as the responsible line officer, issue instructions to his line subordinate, the factory manager.

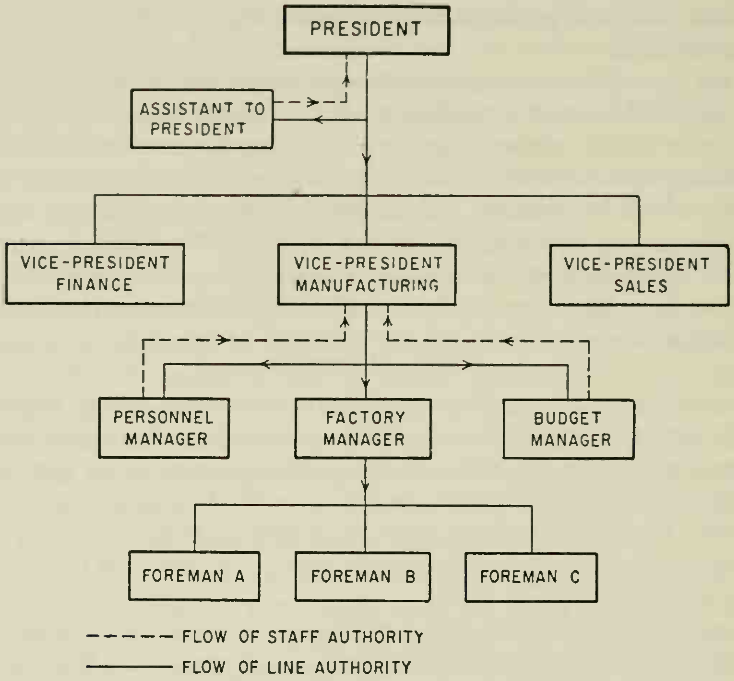
PRESIDENT
ASSISTANT TO PRESIDENT
VICE-PRESIDENT FINANCE
VICE-PRESIDENT MANUFACTURING
VICE-PRESIDENT SALES
PERSONNEL MANAGER
FACTORY MANAGER
BUDGET MANAGER
FOREMAN A
FOREMAN B
FOREMAN C
FLOW OF STAFF AUTHORITY
FLOW OF LINE AUTHORITY

Fig. 4. Line and staff authority relationships.

This simplified diagram of the flow of staff authority emphasizes an important, though sometimes forgotten, aspect of staff operation. As was apparent from the discussion of authority in Chapter 4, while the president has the unilateral power to *order* his line vice-presidents to undertake a certain plan and while the vice-president for manufacturing has a similar power over his factory manager, effective administration and good personnel relations require that line subordinates understand and agree to these policy decisions. Efficient staff work thus requires the staff assistant to seek the advice of responsible line officers and to have them, if possible, agreeable to his recommendation *before* it goes to his superior. A line manager will more likely follow a recommendation if it can be shown that the advice meets with the approval of those managers who must implement the required decision. A well-sold recommendation is likely to be an accepted recommendation. A staff recommendation, developed secretly and without the assistance of the responsible line officers, not only places on the line manager the task of making sure that it is sound and acceptable, but often brings down on the head of the staff assistant the understandable suspicion—and often resentment and opposition—of the line executives who are asked to administer a program on which they had not been consulted.

Functional Authority

Functional authority is the power of one manager over specified processes, practices, policies, or other matters relating to the implementation of activities undertaken by personnel in other departments. If the principle of unity of command were followed without exception, the power over these activities would be exercised by line superiors. There are numerous reasons—including lack of special knowledge, lack of ability to supervise the processes, and danger of diverse interpretations of policies and procedures—that explain why line superiors cannot perform this task. Because of such shortcomings, the line superior will in restricted instances be deprived of authority, and a manager in another department will be delegated specialized, *i.e.*, "functional," authority to see that the activities are carried out.

Functional authority is not restricted to the manager of a particular type of department. It may be exercised by line, service,[11] or staff department heads, although the latter two groups are most important in this respect because they are usually comprised of specialists whose knowledge more often becomes the basis for functional controls.

Development of functional authority. The successive steps by which a line manager gradually gives up his authority over particular activities make an interesting study. As has already been emphasized, the pure staff specialist offers advice or recommendations to his line superior, from whom they may issue as instructions and be filtered down the organization hierarchy. The first modification of this relationship ordinarily occurs when the staff man's superior delegates authority to him to transmit information, proposals, and advice directly to the line executive's subordinates. For example, a personnel assistant might be permitted to transmit directly to the operating department heads information and advice on the handling of labor grievances, instead of having these first submitted to the president and then submitted by him to the line organization. Obviously, this course of action saves the president the time and trouble of reviewing the personnel assistant's counsel and expedites the receipt of such information by the responsible line department heads.

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[11] It is recognized that some so-called staff departments are service departments. Since the latter reflect a special grouping of activities and since this discussion is concerned with line and staff authority relationships, the analysis of service departments as a special organizational form is postponed to Chap. 10.

A second modification might be to allow the specialist not only to transmit information and advice to the line managers but to consult with them and show them how the information should be used or how the recommendations should be put into effect. For instance, the personnel assistant referred to above might be asked to advise line personnel on changing their procedures to eliminate mishandling of grievances. It will clearly be advantageous to all concerned if the staff men can instruct the persons responsible for this activity. Of course, there is no question of the staff man's ordering them to follow a given procedure. The agreement of the line executives, who are already subordinate to the staff specialist's superior, is needed; or should this not be forthcoming, the staff assistant can appeal to his superior to issue the requisite instructions.

The final transition to functional authority is accomplished when the assistant is delegated specific authority to *prescribe* processes, methods, or even policy to be followed in all subdivisions of either staff or operating departments. The personnel assistant, for example, who once could only advise, now has limited authority to supervise the line organization. Note that the authority is usually limited to a special function or process. The personnel assistant no longer need limit himself to *advising* his superior or the line organization concerning the appropriate procedures for handling grievances. Now, he may *issue orders* prescribing them. Or, to use another example, the controller of a corporation may be given authority, not to recommend, but to prescribe the kind of records to be kept by the accounting section of the sales department, the sales division, or the sales district, as well as the various manufacturing departments.

This control is limited, however, to function. The factory manager, handling his labor grievances in accordance with procedures prescribed by the personnel manager, or the district sales manager, keeping his records according to instructions of the controller, do not report to these officers but are subject to the orders, supervision, and control of their line superiors. The extent of their control by the staff officer is in the functional procedure or policy they employ.

Functional authority delegation. The nature of functional authority can perhaps be better understood if it is regarded as a small slice of the authority of the line superior. The president of a corporation, for example, has the complete authority to manage the corporation, subject only to the limitations placed upon him by such superior authority as the board of directors, the corporate charter and bylaws, and government regulations. In the pure staff situation, his advisers on personnel, accounting, purchasing, or public relations have no part of this authority, their duty being merely to offer counsel in these specialized fields. On the other hand, where functional authority relationships exist, the president actually delegates some of his authority to these staff subordinates to issue instructions directly to the line organization.

This delegation might be shown by Figure 5:

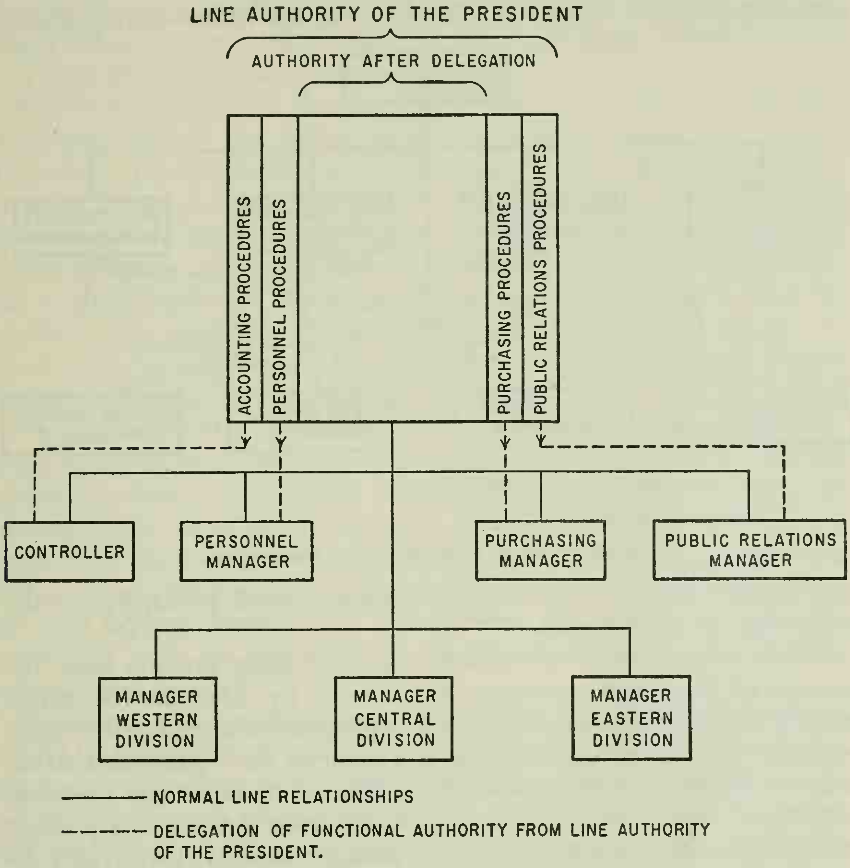
LINE AUTHORITY OF THE PRESIDENT
AUTHORITY AFTER DELEGATION
ACCOUNTING PROCEDURES
PERSONNEL PROCEDURES
PURCHASING PROCEDURES
PUBLIC RELATIONS PROCEDURES
CONTROLLER
PERSONNEL MANAGER
PURCHASING MANAGER
PUBLIC RELATIONS MANAGER
MANAGER WESTERN DIVISION
MANAGER CENTRAL DIVISION
MANAGER EASTERN DIVISION
NORMAL LINE RELATIONSHIPS
DELEGATION OF FUNCTIONAL AUTHORITY FROM LINE AUTHORITY OF THE PRESIDENT.

Fig. 5. Creation of functional authority relationships over procedures.

In Figure 5, the four staff executives have functional authority over the line organization with respect to procedures in the fields of accounting, personnel, purchasing, and public relations. What has happened is that the president, no longer feeling it necessary that such specialized matters be cleared through him, has delegated authority to staff assistants to issue their own instructions to the line. Likewise, of course, the various line managers and their line subordinate managers could themselves set up staff managers with functional authority, as when the superintendent of a factory department sets up cost, production-control, and quality-control supervisors with functional authority to prescribe procedures for the factory foremen in the department.

Functional authority exercised by line managers. Line department heads sometimes have good reasons to control some method or process of another line department. For example, the vice-president in charge of sales may be given functional authority over the manufacturing executives in such matters as scheduling customer orders, packaging, or the availability of service parts.

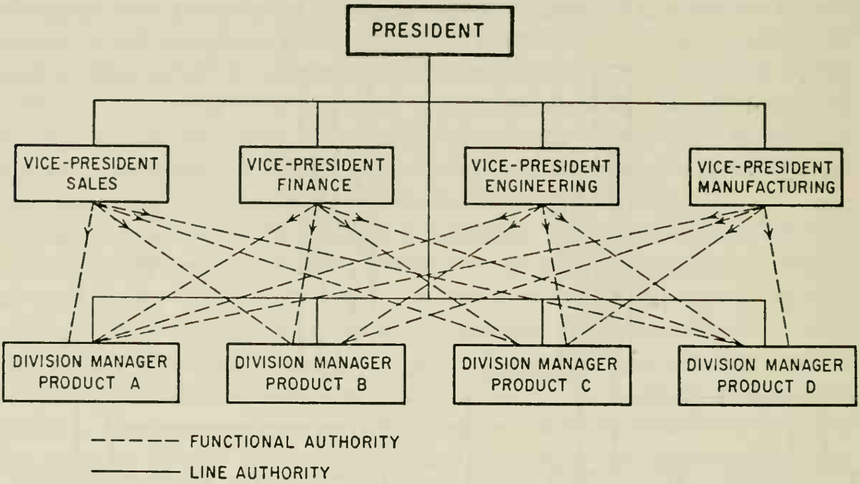
PRESIDENT
VICE-PRESIDENT SALES
VICE-PRESIDENT FINANCE
VICE-PRESIDENT ENGINEERING
VICE-PRESIDENT MANUFACTURING
DIVISION MANAGER PRODUCT A
DIVISION MANAGER PRODUCT B
DIVISION MANAGER PRODUCT C
DIVISION MANAGER PRODUCT D
FUNCTIONAL AUTHORITY
LINE AUTHORITY

Fig. 6. Functional authority of line departments.

Where a company is territorially organized along product lines, the exercise of functional authority over the line by other line executives is likely to be rather commonplace. For purposes of administrative convenience, particularly coordination at a point in the organization structure, all functions of sales, production, finance, or other line functions (*i.e.*, "line" to the enterprise) may be placed under a division or product manager. In this case the territorial or product managers may report directly to the president, or, as is sometimes the case, to the vice-president in charge of production. In either case certain top line officials of the company, in charge of a major function of the business, might not have a direct line of authority over the territorial or product managers. But, to make sure that sales policy or financial policy is properly followed in the divisions, these officers may be given functional authority over the main line of the organization. This kind of arrangement is illustrated in Figure 6.

The area of functional authority. Functional authority is usually restricted authority. The functional authority of the purchasing manager, for example, is generally limited to the procedures to be used in divisional or departmental purchasing. While he may *conduct* certain purchasing activities of an over-all company nature, he is thereby acting either as a direct line officer over a portion of purchasing or as head of a service department. The functional authority of the personnel manager over the general line organization is likewise ordinarily limited to the prescription of procedures for handling grievances, for administering wages and salaries, and for handling vacations and similar matters, but he may formulate important personnel policy.

Functional authority is thus usually limited to the area of "how" and sometimes "when," but seldom applies to "where," "what," or "who." The reason for this limitation is not found in any logical demarcation between normal line authority and functional authority, since the latter *can* be made to apply to any aspect of authority. It is rather that the functionalization of management, if carried to extremes, would destroy the manager's job and therefore destroy departmentation. As will be recalled from an earlier discussion, whenever a manager loses his authority to plan, organize, staff, direct, and control the activities within his department, he has lost his ability to manage.

To some extent this loss occurs when a staff or line executive has functional authority over some part of another manager's job. Even when the personnel manager requires the factory manager to follow seniority in making layoffs or to grant employees definite pay and vacation allowances, he is interfering with some of the factory manager's prerogatives. When the accounting department requires the district sales managers to file their expense accounts in a certain form, they are, to some extent, interfering with the authority of the general sales manager over his subordinates.

Therefore, well-managed concerns recognize that functional authority should be used sparingly and only where necessity exists. But this necessity comes often from both outside and inside influences. On the outside are the requirements of such institutions as government and labor unions that must be interpreted and administered by specialists. On the inside are matters of such importance or complexity that the best possible grade of uniform action is required, requiring in turn that the expert be given authority to make sure that desired procedures are followed. But a rather thin line sometimes marks the division between what should be under the controlling guidance of the expert and what should be under the jurisdiction of the line manager. Where there is doubt, good practice would seem to favor limiting the area of functional authority so that the integrity and effectiveness of the line manager's position are not weakened.

Unity of command and the flow of functional authority. Limiting the flow of functional authority is, then, important in preserving the integrity of the managerial position. If a company had, as some do, executives with functional authority over procedures in the fields of personnel, purchasing, accounting, traffic, budgets, engineering, public relations, law, sales policy, and real estate matters, the complications in line of authority could be great indeed. A factory manager or a sales manager might have, in addition to his line superior, five, ten, or even fifteen bosses, a situation sometimes unavoidable if the necessities and advantages of specialization obtained by the use of functional authority arrangements are to be gained.

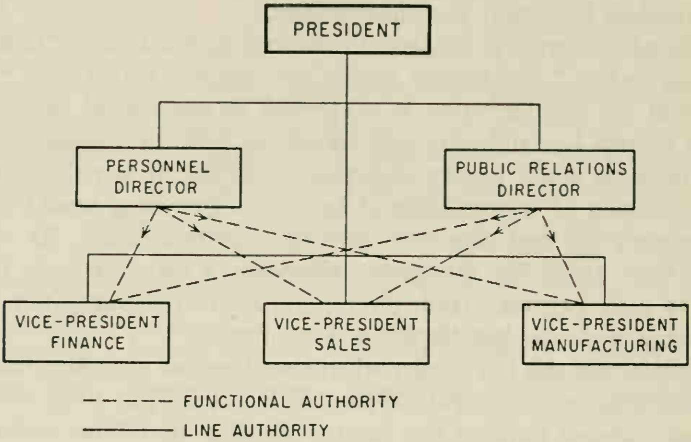

Fig. 7

But preservation of some semblance of unity of command can be maintained by requiring that the line of functional authority of any manager shall not extend beyond the first level of organization below that of his own superior. Thus, in the organization charted in Figure 7 the functional authority of the personnel or public relations director should not extend beyond the level of the vice-presidents in charge of finance, sales, or manufacturing. In other words, the functional authority should be coordinated at the nearest possible point in the organization structure to preserve the unity of command of the line executives.

The manner in which this concentration of functional authority can be effected in large companies with a number of levels of organization is apparent from Figure 8. As will be noted, the manager in charge at each level of authority has concentrated in him all the directions of the various functional principals at each level above him. While these lines of functional authority may seem to be complicated—and, as any regional manager knows, this intricacy is as real as apparent—the complications would be increased many times if the flow of functional authority were not concentrated at each level.

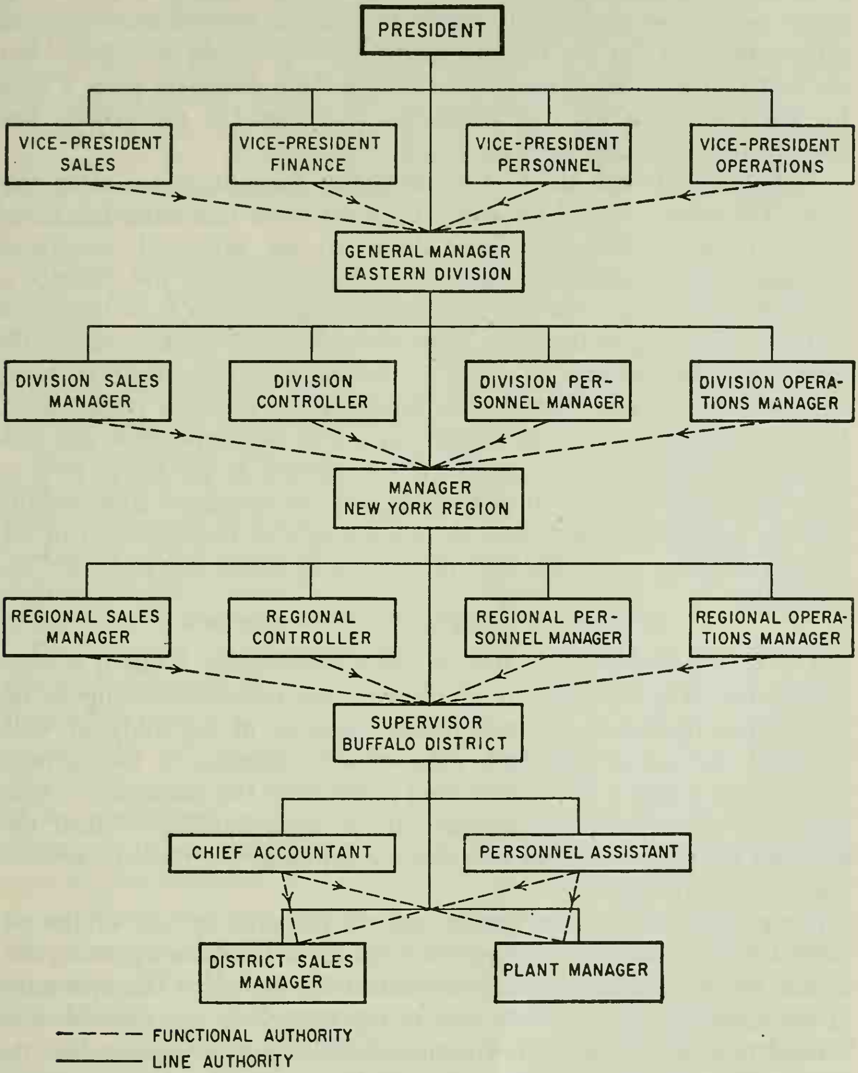
PRESIDENT
VICE-PRESIDENT SALES
VICE-PRESIDENT FINANCE
VICE-PRESIDENT PERSONNEL
VICE-PRESIDENT OPERATIONS
GENERAL MANAGER EASTERN DIVISION
DIVISION SALES MANAGER
DIVISION CONTROLLER
DIVISION PERSONNEL MANAGER
DIVISION OPERATIONS MANAGER
MANAGER NEW YORK REGION
REGIONAL SALES MANAGER
REGIONAL CONTROLLER
REGIONAL PERSONNEL MANAGER
REGIONAL OPERATIONS MANAGER
SUPERVISOR BUFFALO DISTRICT
CHIEF ACCOUNTANT
PERSONNEL ASSISTANT
DISTRICT SALES MANAGER
PLANT MANAGER
FUNCTIONAL AUTHORITY
LINE AUTHORITY

Fig. 8. Concentration of functional authority at levels in an organization.

Nevertheless, one finds in practice that the actual lines of authority do not operate in this manner, even though organizationally it is intended that they do so. From the organization example in Figure 8, one would expect that the general manager of the Eastern division of the company would immediately pass on all instructions from the vice-president of sales to the division sales manager. The manager of the New York region would likewise, as a matter of practice, relay instructions of the division sales manager to the regional sales manager. In fact, in many cases these instructions would be relayed without the divisional general manager's or the regional manager's ever having seen them. But the fact that they are transmitted *through* these managers gives a basis for unity of command that could not be retained if the general line managers at each level were bypassed.

At the same time, it must be admitted that this principle is often violated. The top officers of the company, even when exercising functional authority, sometimes issue instructions to all personnel concerned throughout the organization. There may be cases where this practice is justified. Where the policy or procedure determination is so important that there must be no deviation, both the prestige of the top responsible officer and the accuracy of direct communication may make it necessary and wise to issue instructions directly to all levels of organization. Where these instructions are actually issued to the responsible line subordinate, as well as to the functional counterpart at the lower level, it does not appear that the principle of unity of command is necessarily harmed. As will be noted later, there are forces of centralization of authority that may make this kind of exercise of functional authority unavoidable.

Line and Staff Principles in Practice

The essential character of line and staff relationships, while it is often misunderstood in practice and has caused many misunderstandings in organizational operation, becomes readily apparent in the study of well-managed enterprises. Although some of the semantics of management occasionally mislead the student (and more often the managed), a clear statement of authority relationships and an understanding of their significance for personal action will identify the kind of authority—whether line, staff, or functional.

For example, in an organization analysis prepared by one of the nation's leading industrial management firms for a fast-growing enterprise, several territorial divisions were established for the major line operations of the company, and a system staff of top executives was established to control over-all policy. In the manual describing this organization, the treasurer's scope of authority was spelled out as follows:

> The Treasurer has line authority over and is responsible for directing activities of such staff personnel as he requires to establish system policies and procedures for the functions under his jurisdiction and to administer system treasury and accounting functions which are reserved for his staff. He has no direct line authority over the day-to-day activities of accounting person-

> nel in the divisions and regions except as specifically delegated by division or region managements. He is responsible for developing and interpreting budgeting, accounting, and financial policies, for assisting the division organizations in carrying out such policies, and for satisfying himself that such policies are correctly and ably administered in the field.
>
> At the request of division managements, or voluntarily when system welfare is materially concerned, the Treasurer and his staff shall make recommendations concerning the employment, promotion, dismissal, or change in compensation of supervisory personnel engaged in activities within his functional responsibility. Final action on such matters shall be taken by division managements when mutual agreement has been reached with system staff department heads concerned.

This general description of authority is supplemented by a listing of major duties. In these it is made clear that the treasurer has the duty of establishing budgetary policy and procedures for the divisions, accounting policies and procedures for the maintenance of adequate accounting records in the divisions, and such other procedures as might be necessary for the discharge of his functional responsibility.

This description makes clear the line, staff, and functional authority relationships of the treasurer. He has line authority over his own department and acts in a staff capacity to top and divisional managers. And he has functional authority to require the major line departments, the divisions, to follow procedures necessary for the discharge of such duties as those involved in good budgeting and accounting.

The Standard Oil Company of California. One of the large and well-managed companies of the country is the Standard Oil Company of California. For more than two decades this firm has paid special attention to organization and has had a department of organization in the top echelon of management. This emphasis on organization has been an outgrowth of the preoccupation of this company with the preparation of job descriptions. When attempts to describe the jobs of managerial personnel encountered problems of the intangible and undefined management aspects of such positions, the result was one of the most interesting analyses of organization that any enterprise has made. Published over a period of years as *The Management Guide*,[12] the manual describing the Standard Oil Company's organization structure and the principles upon which it is based, as well as the detailed job description of key members of management, has become a widely influential work on practical organization.

According to the 1948 edition of the manual, the organization structure is as portrayed in Figure 9. Such a structure would normally be re-

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[12] G. L. Hall, *The Management Guide* (San Francisco: Standard Oil Company of California).

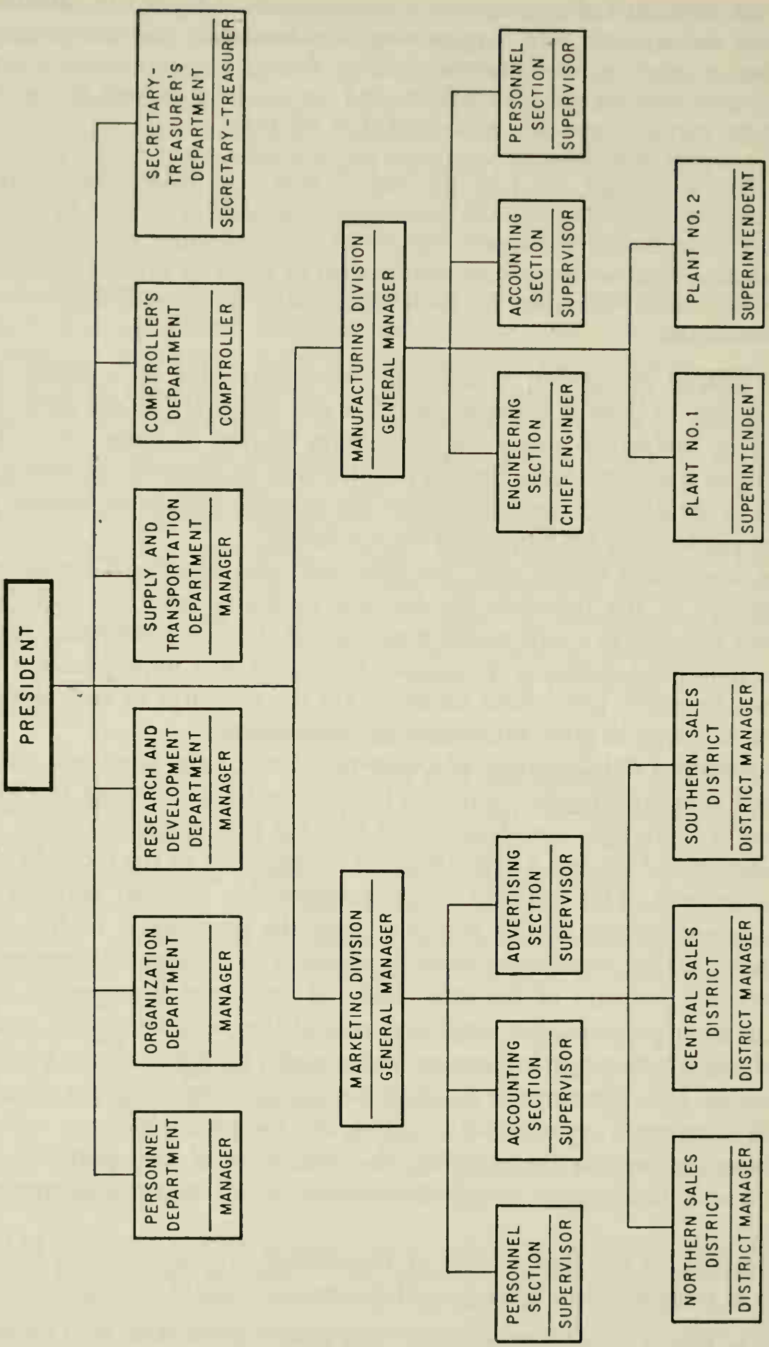
PRESIDENT
PERSONNEL DEPARTMENT
MANAGER
ORGANIZATION DEPARTMENT
MANAGER
RESEARCH AND DEVELOPMENT DEPARTMENT
MANAGER
SUPPLY AND TRANSPORTATION DEPARTMENT
MANAGER
COMPTROLLER'S DEPARTMENT
COMPTROLLER
SECRETARY-TREASURER'S DEPARTMENT
SECRETARY-TREASURER
MARKETING DIVISION
GENERAL MANAGER
PERSONNEL SECTION
SUPERVISOR
ACCOUNTING SECTION
SUPERVISOR
ADVERTISING SECTION
SUPERVISOR
NORTHERN SALES DISTRICT
DISTRICT MANAGER
CENTRAL SALES DISTRICT
DISTRICT MANAGER
SOUTHERN SALES DISTRICT
DISTRICT MANAGER
MANUFACTURING DIVISION
GENERAL MANAGER
ENGINEERING SECTION
CHIEF ENGINEER
ACCOUNTING SECTION
SUPERVISOR
PERSONNEL SECTION
SUPERVISOR
PLANT NO. 1
SUPERINTENDENT
PLANT NO. 2
SUPERINTENDENT

Fig. 9. Organization structure of the Standard Oil Company of California.

ferred to as line and staff organization. The president, general managers of the marketing and manufacturing divisions, the sales district managers, and the plant superintendents are the basic line organization. Other departments, such as personnel, organization, accounting, and advertising, are regarded as staff to the enterprise as a whole.

As a matter of fact, the *Management Guide* of the company so identifies these departments in its descriptions of the managers' various duties. For example, the general manager of the manufacturing division and the district manager of the Northern sales district are referred to as "line members of management"; and the manager of the organization department and the supervisor of each of the personnel sections, as "staff members of management." The staff departments are generally given, in addition to their staff status, authority to furnish "functional guidance" to the various managers of the company on matters within their functional specialization. Thus, the comptroller's job is described, as follows: [13]

> As a staff member of management, the Comptroller is charged with advising the President and furnishing functional guidance to the General Managers of the Divisions on accounting, auditing, the budget, the preparation and payment of payrolls, tax matters, the compilation of statistics, and office methods and procedures, and with conducting such activities for the Managers of the staff departments.

This description means, of course, that the comptroller has a staff relationship to the president, a functional authority relationship over the divisional managers, and operates as a service department [14] for the various staff departments. The variety of functional authority so granted is slightly different in the case of the Standard Oil Company from that in many companies. The company attempts to preserve the complete integrity of its line organization by describing what it means by "functional guidance" in the following terms: [15]

> This does not mean that staff members issue orders, supervise activities, or control any portion of the operating groups. Each staff man recommends policies to the head of the enterprise for his approval. Once these policies are approved, procedures in line with the policies are established, in some cases by the staff member concerned, and in other cases by the top position upon recommendation of the staff member.
>
> After establishment of a procedure, the staff man within whose particular province the particular procedure falls, furnishes the appropriate operating component chief with technical or specialized advice and assistance in the application of the procedure. The staff man is responsible for furnishing this functional guidance, and is accountable to his principal for the fulfillment of

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[13] *Ibid.*, p. 48.

[14] For a discussion of this concept, see Chap. 10 below.

[15] *Ibid.*, p. 36.

this responsibility. The chief of the operating component is responsible for the application of the functional guidance which he receives, and is accountable to *his* principal for the fulfillment of *his* responsibility. In no case is the chief of the operating component subject to the orders, supervision, or control of the staff man, nor can he ever be held accountable to the staff man for fulfillment of his responsibilities.

Briefly, this hybrid type of line-and-staff organization permits help and guidance to be given to the operators by the specialists, and at the same time ensures that an individual has only one person to whom he reports.

The Standard Oil Company, in order to protect the integrity of the principle of unity of command, has taken great care to point out that the staff member cannot order, direct, or control a line manager. At the same time, it is clear that, when the staff member establishes procedures at the direction of his principal (who also happens to be the principal of the line executive whom the staff man is advising), he is actually exercising functional authority by issuing orders that the line has little alternative but to follow.

While the job of the secretary-treasurer is referred to as "staff," the description states that this officer, in addition to his obligation to advise the president, "conducts" the financial, legal, and secretarial affairs of the company. He has a definite line authority, therefore, over this segment of the company's operations. If one regards the handling of finances as a major activity of a business enterprise, along with production and sales,[16] the predominately line position of this manager becomes clear.

One of the interesting features of the description of jobs in the Standard Oil Company's organization is that of the advisory duties of the key line officers. For example, the general manager of the manufacturing division, referred to as a line member of management, is charged with "advising the president" in addition to "conducting" manufacturing, packaging, engineering, maintenance, technical services, warehousing, and similar line functions. Likewise, the superintendent of plant number 1 is charged with advising the general manager as well as conducting his line operations, a duty that recognizes that line officers customarily have staff duties and supports the conclusion that the distinction between line and staff is one of relationship rather than activity.

The Army Staff. An interesting example of the uses of line and staff and of the unavoidable nature of functional-staff relationships as enterprises become complex and problems difficult is that of the top organization of the United States Army. This organization has been summarized in Figure 10. As can be seen, the principal line authority in the Department of the Army is from the Secretary and his assistants to the Chief of Staff to the various Army commands. With the exception of the Vice-Chief of Staff, the deputy chiefs of staff, and the Comptroller, the remainder of the organization is comprised of staffs, the one of major importance being the General Staff.

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[16] See discussion of major departments above, pp. 102–103.

This is indeed a huge organization of staffs. The Chief of Information and the Chief of Legislative Liaison are special staff assistants to the Chief of Staff's office. The General Staff and the Special Staff are likewise staff assistants to the Chief of Staff, as are, in reality, the Administrative and Technical staffs, although these report to the Assistant Chief of Staff, Personnel, and the Assistant Chief of Staff, Logistics, respectively. Together, the staffs comprise the Army Staff, whose duties are prescribed as follows: [17]

> 1. Prepare such plans for the National Security, and the use of the Army for that purpose, both separately and in conjunction with the naval and air forces, and for recruiting, organizing, supplying, equipping, training, servicing, mobilizing, and demobilizing the United States Army, as will assist the execution of any power vested in, duty imposed upon, or function assigned to the Secretary of the Army or the Chief of Staff by law, by the President, or by the Secretary of Defense;
> 2. Investigate and report upon all questions affecting the efficiency of the Army and its state of preparation for military operations;
> 3. Prepare detailed instructions for the execution of approved plans and to supervise the execution of such plans and instructions;
> 4. Act as agents of the Secretary of the Army and the Chief of Staff in informing all officers and coordinating the action of all agencies and commands of the Army Establishment;
> 5. Perform such other duties not otherwise assigned by law as may be prescribed by the President, the Secretary of Defense, or the Secretary of the Army.

The above description of staff duties and the job descriptions of the various staff heads disclose very few instances of pure staff authority. All the heads of the staff departments have considerable advisory authority, but in practically every case, they have functional authority over many aspects of Army operations.

The Chief of Information not only advises the Secretary of the Army and the Chief of Staff on public information matters, but, "in accordance with policies established by the Secretary of Defense, supervises and coordinates the world-wide implementation of public information and troop education of the Army." The Assistant Chief of Staff, G-2, Intelligence, "plans, coordinates, and supervises the collection, evaluation, and dissemination of intelligence information . . . ; advises on counterintelligence matters; supervises counterintelligence activities; su-

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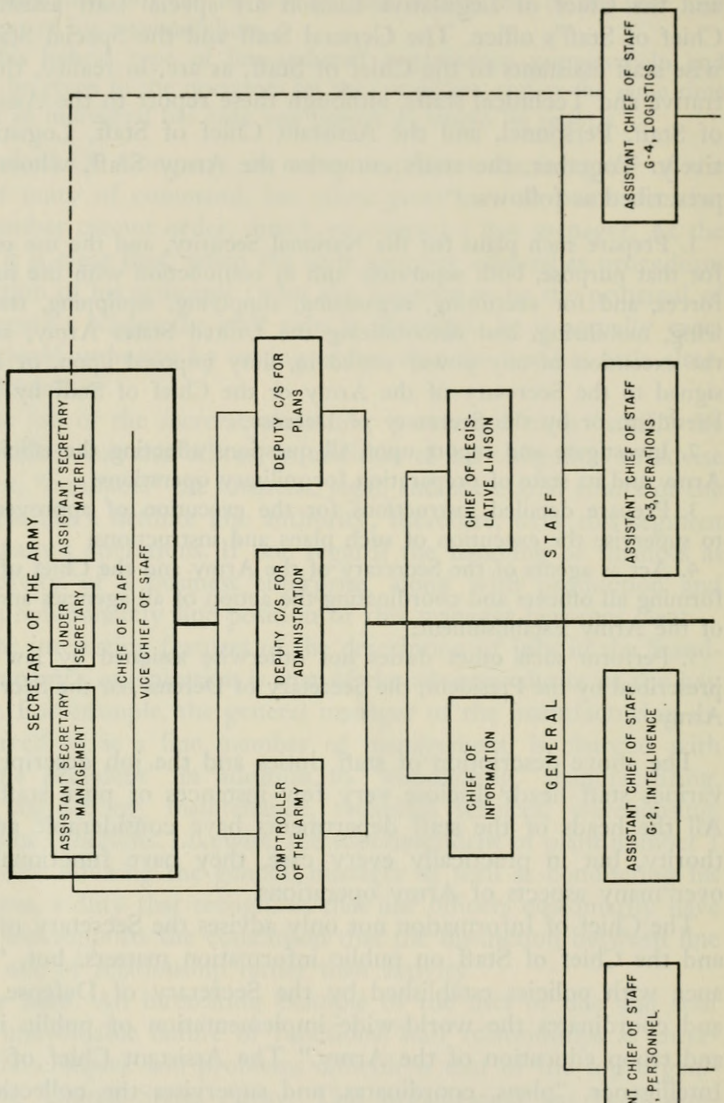
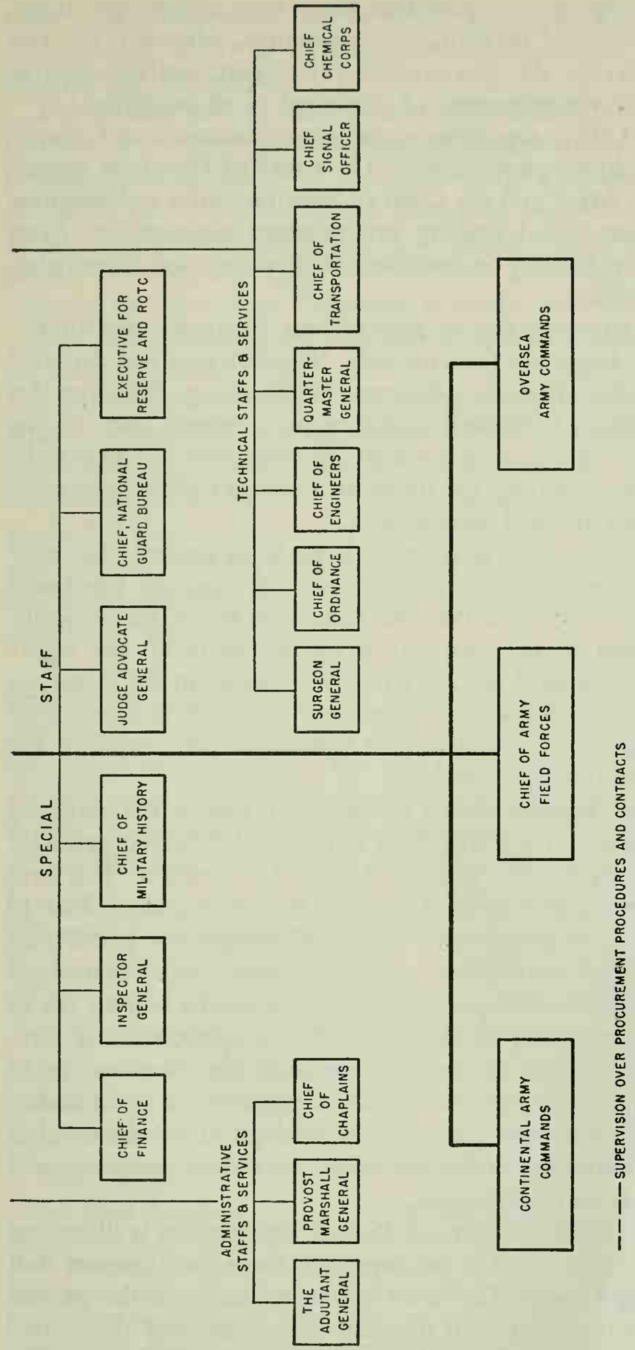
[17] *Organization and Functions* (Washington: Department of the Army, spec. reg. 10–5–1, April, 1950), pp. 9–10.


SECRETARY OF THE ARMY
ASSISTANT SECRETARY MANAGEMENT
UNDER SECRETARY
ASSISTANT SECRETARY MATERIEL
CHIEF OF STAFF
VICE CHIEF OF STAFF
COMPTROLLER OF THE ARMY
DEPUTY C/S FOR ADMINISTRATION
DEPUTY C/S FOR PLANS
CHIEF OF INFORMATION
CHIEF OF LEGISLATIVE LIAISON
GENERAL STAFF
ASSISTANT CHIEF OF STAFF G-1, PERSONNEL
ASSISTANT CHIEF OF STAFF G-2, INTELLIGENCE
ASSISTANT CHIEF OF STAFF G-3, OPERATIONS
ASSISTANT CHIEF OF STAFF G-4, LOGISTICS


SPECIAL STAFF
CHIEF OF FINANCE
INSPECTOR GENERAL
CHIEF OF MILITARY HISTORY
JUDGE ADVOCATE GENERAL
CHIEF, NATIONAL GUARD BUREAU
EXECUTIVE FOR RESERVE AND ROTC
ADMINISTRATIVE STAFFS & SERVICES
THE ADJUTANT GENERAL
PROVOST MARSHALL GENERAL
CHIEF OF CHAPLAINS
TECHNICAL STAFFS & SERVICES
SURGEON GENERAL
CHIEF OF ORDNANCE
CHIEF OF ENGINEERS
QUARTER-MASTER GENERAL
CHIEF OF TRANSPORTATION
CHIEF SIGNAL OFFICER
CHIEF CHEMICAL CORPS
CONTINENTAL ARMY COMMANDS
CHIEF OF ARMY FIELD FORCES
OVERSEA ARMY COMMANDS
— — — SUPERVISION OVER PROCUREMENT PROCEDURES AND CONTRACTS

SOURCE: DEPARTMENT OF THE ARMY, ORGANIZATION AND FUNCTIONS, SPECIAL REGULATIONS (NO. 10-5-1, APRIL, 1950).

Fig. 10. Organization of the Department of the Army.

pervises military mapping; and performs the Army cryptologic functions." The Assistant Chief of Staff, G-1, Personnel, advises, plans, coordinates and "supervises the procurement, allocation, welfare, separation, and administrative management of personnel of all categories."

The Chief Signal Officer supervises signal communications and related activities, including Army photography. The Chief of Chaplains advises the Secretary of the Army and the Chief of Staff on moral and religious matters and supervises moral training and religious ministrations. Even the Chief of Military History is described as directing and supervising Army historical activities.

Only one of the large number of staff officers apparently has purely staff functions. The Inspector General only "inquires into and reports" upon those matters that affect the efficiency of the Army. But even this official actually exercises functional authority over various parts of the line organization. It is a rare field commander who does not undertake to correct deficiencies found by the Inspector General's office before the "advisory" report has reached Washington.

In the Army, as in business, an attempt is made to protect the unity of command by having all these instructions and cases of functional guidance go to the line commander and from him to his line subordinates. But the pattern of the top staff is duplicated in all the upper echelons of the line command and, as a practical matter in the Army, as in business, specialized instructions from the top staff officers filter through the organization by following a functional path through the line staff assistants in the line command.

Use of staff in the General Motors Corporation. One is not surprised to find a system similar to the Army Staff in the world's largest privately owned industrial enterprise, the General Motors Corporation. This firm employed 551,000 employees in 1953, had 494,000 stockholders, sold 10 billion dollars' worth of goods, and operated through forty different manufacturing divisions, with plants over the entire United States and in several foreign countries. Despite its size, this industrial empire has an enviable record of managerial excellence, profitable operation, and service to the American people. It poses tremendous organizational problems, and while its organizational success is due primarily to good leadership and the decentralization of authority (a principle to be discussed in a later chapter), its utilization of line and staff has been an interesting and important managerial accomplishment.

The top organization of the General Motors Corporation is illustrated in Figure 11. It can be seen that at the top levels there are a general staff and financial and legal staffs. The latter are separated from the general staff because of the desire to keep financial operations, and the related legal-staff activities, separate from the manufacturing and sales operations of the business. As will be noted later, good management of an enterprise, particularly of a far-flung one, dictates that control of finances be relatively centralized.

The general staff in this corporation is similar to that of the Department of the Army.[13] Most of the staff departments are headed by a vice-president, and all report for administrative purposes to an executive vice-president. All the executives in charge of the staff departments act in an advisory capacity to both the divisional managements and the corporation executives. They also have an important policy-formulation function and have some functional authority over the line divisions.

The policy-formulation functions of the staff departments are among the most important keys to the successful operation of General Motors. The various staff divisions make recommendations on major policy matters to the administration committee and the operations policy committee of the company. The engineering staff, for example, works on future policies and coordinates the product-development programs of the divisions, presenting their studies to the top committees. The styling staff has the authority to create and develop advanced automobile and truck styles, and works with the various car and body divisions in presenting new body designs for the model year.

Since these staffs actually recommend policy to top management through the operations policy committee and the administration committee and since they actually participate on these committees and their specialized subcommittees, the line organization finds cooperation with the staff good practice for effective and expeditious policy formulation. A line divisional manager need not so cooperate and need not take the advice of the staff department, but his failure to do so might be to his own detriment when the staff recommendations are given to top management. By the same token, if the staff department does not sell its ideas to the line organization and cooperate with the line managers, the result would be a divided program at the top committee level. Not that differences apparently do not occur. But the need for staff and line cooperation in the formulation of major policy is a strong force toward compelling cooperation at the lower levels. The staff organizations can also be helpful in other ways than in merely assisting the line in obtaining a favorable decision. The specialized knowledge of the staffs and

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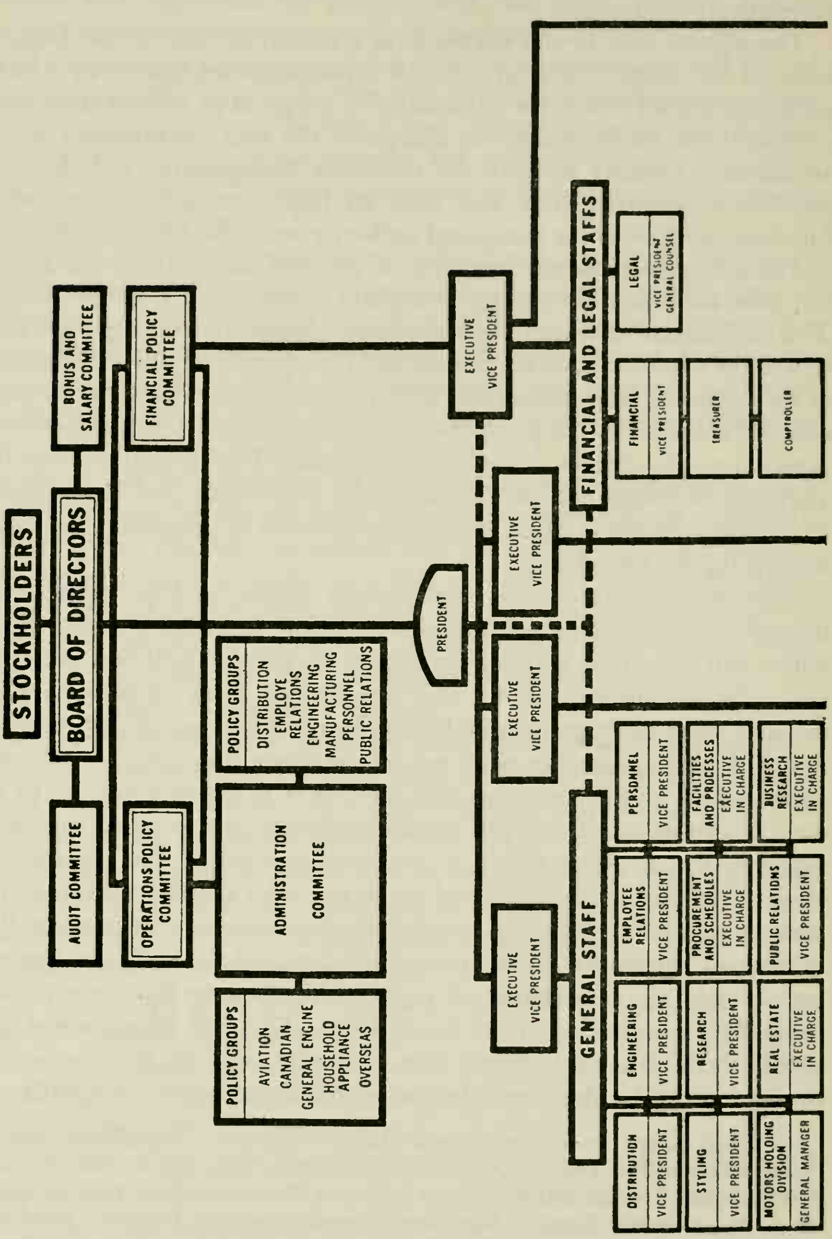
[13] A good description of the General Motors Corporation organization may be found in *GM and Its People* (Detroit: General Motors Corporation, 1949). See also P. F. Drucker, *Concept of the Corporation* (New York: The John Day Company, Inc., 1946), especially Chap. 2. Note that the motors holding division is listed as a staff department when it is actually not of that nature but a division to handle financing of dealers, assigned for administrative convenience to the executive vice-president in charge of the general staff.


STOCKHOLDERS
BOARD OF DIRECTORS
AUDIT COMMITTEE
BONUS AND SALARY COMMITTEE
OPERATIONS POLICY COMMITTEE
FINANCIAL POLICY COMMITTEE
ADMINISTRATION COMMITTEE
POLICY GROUPS
DISTRIBUTION
EMPLOYE RELATIONS
ENGINEERING
MANUFACTURING
PERSONNEL
PUBLIC RELATIONS
POLICY GROUPS
AVIATION
CANADIAN
GENERAL ENGINE
HOUSEHOLD APPLIANCE
OVERSEAS
PRESIDENT
EXECUTIVE VICE PRESIDENT
EXECUTIVE VICE PRESIDENT
EXECUTIVE VICE PRESIDENT
EXECUTIVE VICE PRESIDENT
FINANCIAL AND LEGAL STAFFS
LEGAL
VICE PRESIDENT GENERAL COUNSEL
FINANCIAL
VICE PRESIDENT
TREASURER
COMPTROLLER
GENERAL STAFF
PERSONNEL
VICE PRESIDENT
EMPLOYEE RELATIONS
VICE PRESIDENT
ENGINEERING
VICE PRESIDENT
DISTRIBUTION
VICE PRESIDENT
FACILITIES AND PROCESSES
EXECUTIVE IN CHARGE
PROCUREMENT AND SCHEDULES
EXECUTIVE IN CHARGE
RESEARCH
VICE PRESIDENT
STYLING
VICE PRESIDENT
BUSINESS RESEARCH
EXECUTIVE IN CHARGE
PUBLIC RELATIONS
VICE PRESIDENT
REAL ESTATE
EXECUTIVE IN CHARGE
MOTORS HOLDING DIVISION
GENERAL MANAGER

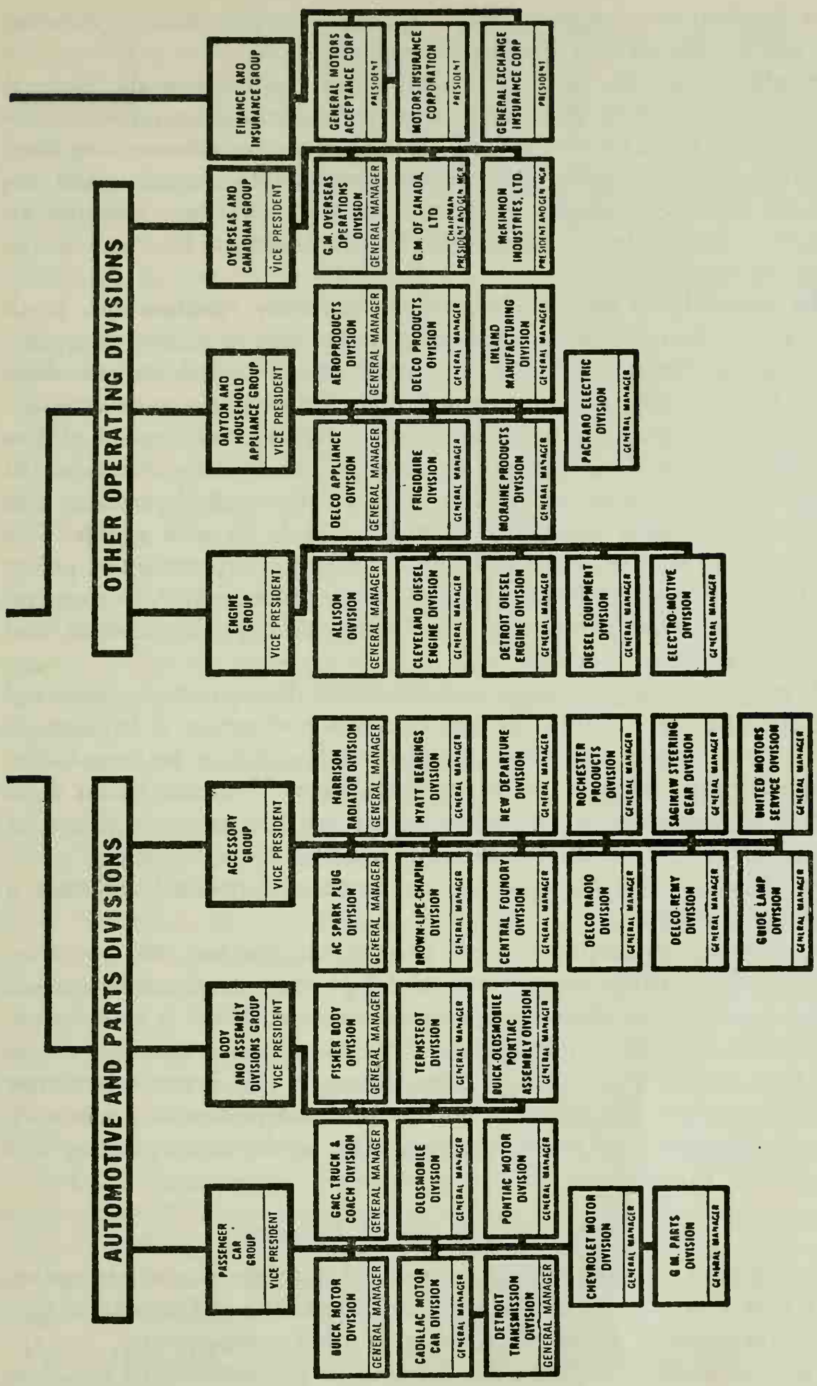

AUTOMOTIVE AND PARTS DIVISIONS
OTHER OPERATING DIVISIONS
PASSENGER CAR GROUP
VICE PRESIDENT
BUICK MOTOR DIVISION
GENERAL MANAGER
GMC TRUCK & COACH DIVISION
GENERAL MANAGER
CADILLAC MOTOR CAR DIVISION
GENERAL MANAGER
OLDSMOBILE DIVISION
GENERAL MANAGER
DETROIT TRANSMISSION DIVISION
GENERAL MANAGER
PONTIAC MOTOR DIVISION
GENERAL MANAGER
CHEVROLET MOTOR DIVISION
GENERAL MANAGER
G.M. PARTS DIVISION
GENERAL MANAGER
BODY AND ASSEMBLY DIVISIONS GROUP
VICE PRESIDENT
FISHER BODY DIVISION
GENERAL MANAGER
TERNSTEDT DIVISION
GENERAL MANAGER
BUICK-OLDSMOBILE PONTIAC ASSEMBLY DIVISION
GENERAL MANAGER
ACCESSORY GROUP
VICE PRESIDENT
AC SPARK PLUG DIVISION
GENERAL MANAGER
HARRISON RADIATOR DIVISION
GENERAL MANAGER
BROWN-LIPE-CHAPIN DIVISION
GENERAL MANAGER
HYATT BEARINGS DIVISION
GENERAL MANAGER
CENTRAL FOUNDRY DIVISION
GENERAL MANAGER
NEW DEPARTURE DIVISION
GENERAL MANAGER
DELCO RADIO DIVISION
GENERAL MANAGER
ROCHESTER PRODUCTS DIVISION
GENERAL MANAGER
DELCO-REMY DIVISION
GENERAL MANAGER
SAGINAW STEERING GEAR DIVISION
GENERAL MANAGER
GUIDE LAMP DIVISION
GENERAL MANAGER
UNITED MOTORS SERVICE DIVISION
GENERAL MANAGER
ENGINE GROUP
VICE PRESIDENT
ALLISON DIVISION
GENERAL MANAGER
CLEVELAND DIESEL ENGINE DIVISION
GENERAL MANAGER
DETROIT DIESEL ENGINE DIVISION
GENERAL MANAGER
DIESEL EQUIPMENT DIVISION
GENERAL MANAGER
ELECTRO-MOTIVE DIVISION
GENERAL MANAGER
DAYTON AND HOUSEHOLD APPLIANCE GROUP
VICE PRESIDENT
DELCO APPLIANCE DIVISION
GENERAL MANAGER
AEROPRODUCTS DIVISION
GENERAL MANAGER
FRIGIDAIRE DIVISION
GENERAL MANAGER
DELCO PRODUCTS DIVISION
GENERAL MANAGER
MORAINE PRODUCTS DIVISION
GENERAL MANAGER
INLAND MANUFACTURING DIVISION
GENERAL MANAGER
PACKARD ELECTRIC DIVISION
GENERAL MANAGER
OVERSEAS AND CANADIAN GROUP
VICE PRESIDENT
G.M. OVERSEAS OPERATIONS DIVISION
GENERAL MANAGER
G.M. OF CANADA, LTD
CHAIRMAN
PRESIDENT AND GEN MGR
McKINNON INDUSTRIES, LTD
PRESIDENT AND GEN MGR
FINANCE AND INSURANCE GROUP
GENERAL MOTORS ACCEPTANCE CORP
PRESIDENT
MOTORS INSURANCE CORPORATION
PRESIDENT
GENERAL EXCHANGE INSURANCE CORP
PRESIDENT

Fig. 11. Organization of the General Motors Corporation.

their freedom to engage in long-range research give them a standing that makes their services appreciated and sought.

In addition to their special role in policy formulation, the General Motors staff divisions often have functional authority over the line divisions. The need for centralizing controls over such matters as labor relations, public relations, procurement, real estate, research, and accounting leads unavoidably to giving the staff specialists authority to prescribe methods and techniques for their counterpart functions in the operating divisions.

The unavoidable nature of functional authority relationships. In all three of the above examples, in virtually every case of a large enterprise, and in a surprising number of smaller enterprises, one finds that the delegation of functional authority to staff departments seems to be unavoidable. Even though a management abhors a hybrid combination of line and staff authority and tries to avoid its use, as does the Standard Oil Company of California, one seldom finds a major staff department that does not have some functional authority outside its own group. This practice is largely due to the necessity for expert interpretation of policy and formulation of procedures by specialists, practices that, in turn, result from the need for uniform accounting, labor, public relations, and similar procedures.

Of course, the line executive could maintain the separation of line and staff authority relationships in his organization structure if he were to insist that all matters requiring specialized staff assistance be turned over to him for the issuing of necessary instructions. However, to do so in modern organizations would either unduly tax the line manager's span of management or, if he automatically accepted his staff assistant's recommendations, make the apparent avoidance of functional authority a meaningless pretense.

It is not too important, anyway, to segregate line and staff authority departmentally. Being authority relationships, they need not be subject to the organizational division required of activities. What is important is to maintain, as much as possible, the unity of command of managers, so that they can, in fact, manage. Every manager and every subordinate should understand the nature of line and staff authorities. A prime duty for any employee is to know when and with whom he is operating in a line or staff capacity.

Staff and the Small Business

The division of labor is highly correlated with the size of enterprise. To a very real extent, staff departments represent a refinement in specialization resulting from the division of labor; consequently, the appearance of staffs in organization tends to be proportional to size. Just how large a business firm must be before it will gain by regrouping certain activities into a staff department cannot be stated generally. It can be stated, however, that it need not be very large before it feels the requirement of specialized assistance on such matters as taxation, government procurement policy, renegotiation of profits, personnel policy and procedures, accounting, financing, contracts and legal matters, and even management itself. The web of government, union, and other controls in which even the small business finds itself has ceased to bring a sharp distinction, in matters of complexity, between the small business and its larger counterpart.

It is not surprising that the specialized assistance of staff officers and departments is most fully developed in the large company. In fact, the ability of such a company to hire the best kind of staff counsel is one of its principal advantages. But the number of firms that may be characterized as large in size is relatively small. A study of business firms in 1944 disclosed that of the business establishments in the United States only 0.12 per cent, or some 3,600 firms, could be classified as large, each having 500 or more employees.[19] In comparison with the United States Army or the General Motors Corporation, even firms of this size are small. Consequently, it is apparent that only a mere handful of the total number of business enterprises are actually large enough to benefit from the economies of extensive specialization through the creation of staff departments.

However, the small company can benefit from staff assistance in many ways. Heads of small companies of thirty or even fewer employees can frequently afford to hire a general staff assistant to make special studies of important business policy. No matter how small the company, one of its essential costs is to obtain legal and tax advice on a retainer, per diem, or job basis. Any firm can receive accounting counsel at reasonable cost from its auditing firm, and audit of a company's books is a necessity where income taxes or bank loans are involved. Other advisory or consulting services include those of bankers and the relatively untapped services available in universities and colleges. Just as the medical schools contribute much to the community, particularly for those who cannot afford the services of the specialist, so should university staffs be available to small businesses in such areas as engineering, accounting, economics, and management. The small corporation, furthermore, can utilize the board of directors as a source of advice and assistance. The opportunity to serve on boards of directors has many attractions to men who are challenged by the opportunity for interesting service and for strengthening the free enterprise system.

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[19] A. D. H. Kaplan, *Small Business* (New York: McGraw-Hill Book Company, Inc., 1948), p. 21.

While the typical small business may, therefore, not have the resources to establish able staff departments of the kind found in the large firm, it has ample opportunity to benefit from the advice of specialists. Indeed, in the present economic, social, and political environment the price of error in such matters as the accurate determination of costs and taxes, the maintenance of good labor relations, and effective planning and control is so great that the small firm cannot afford to do without the best possible counsel.

It is in the small firm that one finds individuals who generally operate in both line and staff capacities. The production manager is likely to be the president's chief adviser on present and future costs and even on the design of new products. The treasurer or controller may also be the principal counsellor on taxes, material prices and availability, or wage levels. But this fact does not change the essential nature of line and staff relationships. Like all fundamental principles, they are the same basically in small as in large firms, and case studies or analyses of the problems of the large firm apply to the small firm also, even though it must exercise care in distinguishing between principle and practice. A staff organization suitable for the General Motors Corporation would bankrupt a company of the size of American Airlines, and a staff organization suitable for the latter would be too expensive for a smaller firm. Thus, one of the arts of good management is to utilize the principles but to tailor the application of them to the resources available.

Limitations in Application of the Staff Principle

While staff departments are a necessary feature of business and other enterprises and while successful staff operation can do much to make an undertaking efficient and effective, the very nature of staff authority and the difficulty of understanding it lead to certain major limitations. Some of the more important of them are briefly discussed here. By knowing the dangers in applying staff principles, both the line executive creating a staff and the staff officer exercising advisory authority may be better able to avoid them.

Danger of undermining authority of line executives. Staff departments are usually viewed with skepticism by operating executives, for they see in them a high potential for harm. Observations of the fortunes of staff departments in individual enterprises are convincing evidence that their prestige tends to ebb and flow. All too frequently a president will bring in a staff executive, clothe him with authority (frequently very vague), and command all other managers to be cooperative. The proposal of the staff man will be received by the president with enthusiasm, and pressure will be brought to bear upon the affected executives to put the recommendation into effect. What is actually taking place here is that the authority of the department head is being undermined; yet grudgingly and resentfully the changes will be accepted because all will recognize the high tide of the staff's prestige.

A continuation of this situation would harm or even destroy the line departments. Efficient managers, not willing to submit to indignity or wait until the tide ebbs, would be snapped up by competitors, and the operating departments would gradually fall into inept hands. The denouement would be for the board of directors to fire the president.

Frequently the prestige of the ill-conceived or ill-operated staff department, rather than swelling like a tide, will only ebb. There are a multitude of ways in which other managers are able subtly to sabotage staff proposals, even those with the imprimatur of the president. Rather than be completely stubborn, the president may then suggest to the staff executive a restudy or tabling of the report.

Above all, no president of an enterprise should ever allow the authority of his department heads to be undermined. These organizations are much older than staff departments; they are basic to the various types of economic organizations and, hence, the natural way to accomplish the division of labor; and they have no satisfactory substitute.

The basic fact is that staff departments are often regarded as expendable. The operating departments represent the main line of the enterprise, and the heads of these departments gain a degree of indispensability. In one company recently, a staff department created by the president found some irregularities in the lower echelons of the purchasing department. Instead of going to the director of purchasing and letting him know what was happening, the head of the staff department reported the findings to the president and sent copies of his report to the vice-presidents of the company. The purchasing director, who reported to the vice-president in charge of production, immediately insisted that either he must resign or the staff man be discharged and was supported by his vice-president. The president had little alternative but to support them and abolish the staff, an action based not only on the staff man's erroneous handling of the report but also on the conviction that the president can hardly undermine the authority of his line lieutenant.

Lack of responsibility of staff departments. Another serious limitation of advisory departments concerns their lack of responsibility. They only propose a plan. Others must put it into operation. This creates an ideal situation for recrimination and the shifting of blame for failures. The staff will claim that it was a good plan and that it failed because the operating executive was inept, disinterested, or intent on sabotage. The manager who must make the plan work will claim that it was a poor plan hatched by inexperienced and impractical theorists.

Thinking in a vacuum. The argument that the organization of a staff department gives the planner time to think is appealing, but its weakness lies in the possibility of thinking in a vacuum. The fatal weakness of impracticality has resulted, in business and government alike, in friction, loss of morale, and sabotage.

There is another phase of this bland assumption that planners must be set off from the line departments in order to think. It implies that the line managers are without creative ability. They may, indeed, be without specialized knowledge, but this can well be furnished by properly hired and utilized staff assistants. Good line managers can analyze plans, see long-range applications, and spot fatal weaknesses far better than can staff assistants. An intelligent manager will not delegate his managerial functions, and it is fatal to his managership to strip away activities such as planning and assign them to a staff assistant.

For operating executives lacking knowledge, imagination, or interest in the development of plans and controls, the hiring of a staff assistant may be of value; as it would be for those with too much to do in running day-to-day operations. The manager might, on the other hand, so organize his department and delegate authority that he will have time to think, plan, and develop effective controls.

Staff may complicate direction and control. Throughout the discussion of line and staff relationships reference has been made to the importance of maintaining unity of command. At high organizational levels it is not easy for a department head to be responsible to two or three executives; at the worker level it is disastrous to attempt multiple responsibility. Some disunity in command may be unavoidable, since functional authority relationships are unavoidable in many enterprises. But the alert manager should always be aware of the difficulties of multiple lines of authority and responsibility and should either limit them, even at the cost of some uniformity or loss of the fruits of specialization, or else establish organizational lines that will protect the unity of command at every possible point in the organization structure.

Furthermore, too much staff activity may complicate the job of direction and control of the line executive to whom the staff reports. A president of a corporation may be so busy dealing with the recommendations of a large number of staff assistants and straightening the twisted lines of authority in his organization that he may not be able to give requisite time and attention to his major line departments, or the business may become so oriented to the making of policy and procedure that it has little time to make shoes or give transportation service. Yet much of the staff work is unavoidable and necessary.

The dilemma has many answers. One is to restrain the proliferation of staff activity; another, to combine staff activity under a chief of staff or a few major staff departments reporting to the chief executive. But perhaps the most important is to insist that staff executives understand the nature of their task.

The key to successful staff operations. Wherever a staff is used, its first and continuing responsibility is to develop and maintain favorable personal relations. The staff must sell and keep selling itself to other executives. Even under the best of circumstances the manager will have a difficult time coordinating staff and line authority, for he can only attempt to persuade men to cooperate. The attempt will be successful only to the extent that the staff officer understands that he must gain and hold the confidence of his colleagues. He must keep in very close touch with the operating departments, know their key managers and staffs, understand their problems, and take every opportunity to be regarded as one of them. He must, through precept and example, convince his line colleagues that his sole interest is their welfare and must seek out means of deprecating his own contributions and embellishing theirs. He will have "arrived" when the line executives seek him out for his advice and ask him to make studies designed to solve their problems. For, after all, his future is in their hands. If there is a supernumerary in an organization, it is likely to be the staff executive.

SELECTED REFERENCES

Dale, E., *Planning and Developing the Company Organization Structure*, Research Report 20, Part I, pp. 61–83. New York: American Management Association, 1952.

Dalton, M., "Conflicts between Staff and Line Managerial Officers," *American Sociological Review*, vol. 15, pp. 342–351 (June, 1950).

Davis, R. C., *The Fundamentals of Top Management*, Chaps. 10–14. New York: Harper & Brothers, 1951.

Gulick, L., and L. Urwick (eds.), *Papers on the Science of Administration*, pp. 49–88. New York: Institute of Public Administration, 1937.

Mooney, J. D., *The Principles of Organization*, rev. ed., Chaps. 3–5, 14, 16–18. New York: Harper & Brothers, 1939.

Newman, W. H., *Administrative Action*, Chap. 11. New York: Prentice-Hall, Inc., 1951.

Petersen, E., and E. G. Plowman, *Business Organization and Management*, rev. ed., Chap. 10. Homewood, Ill.; Richard D. Irwin, Inc., 1949.

Urwick, L., *Profitably Using the General Staff Position in Business*, General Management Series, No. 165. New York: American Management Association, 1953.

Authority of staff / work takes / form of Authority of "Know how"
(always recommendation not authority to do) of technical competence.

10

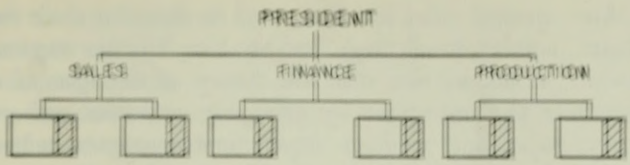
SERVICE DEPARTMENTS

The concept of a service department is quite distinct from that of either a so-called line or a staff department. Such terms as "service," "facilitating," "auxiliary," and, more simply, "aid" have been employed to convey the nature of these activities. A service department does sometimes facilitate the operation of line and staff and other service departments, it is correct to view some auxiliary activities as contributing to the efficiency of all other departments; and it is proper to say that service departments both serve and aid other grouped activities. In addition, it is important to recognize that service departments represent *grouping of activities* and thus involve the performance of an operating function. Line and staff, on the other hand, are organizational names given to two basic kinds of authority relationships.

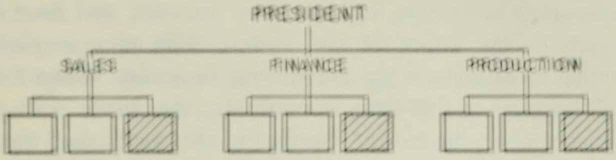
A further distinction between the service department and other types relates to the occasion for its appearance. The point has been made previously that the span of management is the limitation that makes departmentation necessary. But such is not the case with respect to service activities. One basis for their appearance in departmental form is economy of performance. It is the consideration of net savings that is determinative in this instance in setting up the particular grouping known as a service department. Another reason is sometimes found in the desire to gain a single, clear, and definite control of policy throughout the organization. Thus, service departments are comprised of a concentration of facilitative activities, which, for reasons of operating economy or policy control, are separated from other types of departments.

Development of Service Departments

Persons familiar with the large, smoothly operated service department of large-scale business may be tempted to overlook the appearance of such departments in embryo form. For instance, at the opening of a new college, a bank, a public utility, or a new department store, no one is surprised to discover the simultaneous creation of some service department such as maintenance, accounting, or personnel. The *reason* for organizing activities in this way may be more clearly observed in the establishment of a small enterprise and in its subsequent growth. Such a metamorphosis of service departmentation is illustrated in Figure 12.


PRESIDENT
SALES
FINANCE
PRODUCTION

A. Organization without specialized service department.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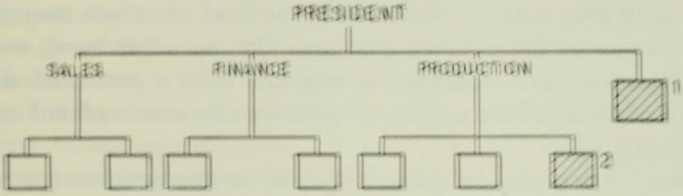
B. Independent service activities grouped within functional departments.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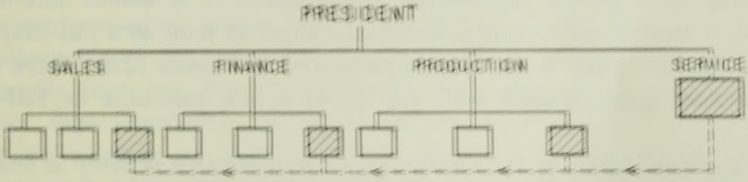
2

C. Company-wide service department reporting either to the president (illustration 1, which is typical of accounting), or to the production manager (illustration 2, which is typical of maintenance, and sometimes personnel).


PRESIDENT
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SERVICE

D. Specialized service department with functional authority over decentralized units re-introduced into functional departments.

Fig. 12. Metamorphosis of service departmentation in a factory. (Shaded areas represent a kind of service activity.)

Origin in economies of specialization. There is no question, of course, of division of labor in a one-man business, but with the addition of one or more clerks the owner can shift some nonmanagerial duties to his subordinates. In the case of a grocery store, the clerks may be expected to receive and check goods against invoice, to price and display goods on shelves, assist customers, and contribute to the neat appearance of the store. Continued growth, accompanied by additions to the clerical force, enables them to specialize in the activities that are associated with the operation. More specific titles are then used to describe their functions, such as cashiers, janitors, stock boys, and the like. Further expansion will force the owner, in accordance with the theory of the span of management, to organize the enterprise by grouping activities and personnel under grocery, meat, and produce department managers, who will be engaged in assigning subordinates to do paper work, maintenance activity, and line work.

Paper work—such as orders, invoices, pay records, and asset records—is typically sent to the office of the owner, who may employ a part-time bookkeeper to undertake the accounting function. When the volume of work will support a full-time accountant, the latter will probably, though not necessarily, be hired.[1] Similarly, the work that the part- or full-time maintenance clerks perform may be accomplished more economically if it is split off from the duties of the departmental managers and regrouped into a single department, the head of which may report to the owner or to the grocery manager. On the other hand, even so large an enterprise as a supermarket may not have a personnel department if the addition of one would add considerable overhead and its staff be underemployed.

The bases for economy in specialization of service activities are rooted in the use of personal skills and specialized equipment, in the full employment of personnel, and in the potential improvement in the quality of service. The existence of a volume of work sufficient to occupy all the time of a person permits the employment of a skilled individual; hence, a trained accountant is ordinarily hired as soon as a full-time job exists for him. Such a situation is portrayed in Figure 12*A*, where each department services itself with the aid of a few part-time or full-time men.

The consolidation of the accounting or maintenance activity in line departments will often permit the economical employment of small-type specialized equipment, such as computing machines or floor waxers. At the same time, several part-time jobs may be consolidated into a few full-time jobs, and these can be undertaken by employees who are able to render prompt service. Centralization to this extent is illustrated in Figure 12*B*, where the shaded department in the sales, production and finance divisions may represent grouped activities relating to recruiting and training employees.

As a firm continues to grow, further economies may be reaped in the manner suggested in Figure 12*C*. The centralization of all accounting activities into a department whose head reports directly to the chief executive can be justified on the basis of economical use of specialized personnel and equipment and on the easy access to information required for developing budgets, controls, and plans. Alternatively, it is common factory practice to consolidate maintenance service in a department that is subordinate to the production manager, thus permitting the economical employment of specially trained labor and specialized equipment, while leaving the new department ready to perform services for other departments as well.

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[1] E. Dale, *Planning and Developing the Company Organization Structure*, Research Report 20 (New York: American Management Association, 1952), p. 72.

The final stage in the development of service departmentation is illustrated in Figure 12*D*. In this instance the firm has grown to the point where certain diseconomies are felt from the degree of centralization achieved in Figure 12*C*. These drawbacks become important where mere size destroys the freedom of quick communication, with a consequent deterioration in the quality of service. In response to these forces it is not uncommon for a firm to reestablish within the important functional divisions a subdepartment whose duty it is to render specialized service. For instance, the main accounting or personnel department may, as a result of delays, misunderstanding of needs, or other problems, be forced to agree to the opening of a cost or a personnel subdepartment in the sales and production divisions. But, in doing so, they still retain functional authority over the subdepartment head, an authority to specify how, but not when or where, he shall undertake his assigned duties. In many cases, the subdepartment head will be trained and appointed to his position by the main service department manager.

Origin in need for policy control. Although service departments seldom develop without the economic advantages of specialization, they rise occasionally from the need for assuring policy control; in other cases of service departmentation the economics of specialization are buttressed by considerations of policy control. There are many modern service departments where the control influence can be seen. With complicated union agreements and extensive labor legislation requiring uniform interpretation, many companies have been forced to concentrate the handling of such matters in a personnel or industrial relations department. To be sure, economies are gained from having specialists work with these problems, but perhaps more important to the firm is the assurance of uniform policies and interpretations.

Similar influences can be seen in the important role of a purchasing department, particularly at times when prices are fixed and materials allocated under government control. During World War II and in the price-fixing days during the Korean war, many larger businesses even found it wise to establish service departments with the sole function of making sure that price regulations were properly reflected in business practice. Policy control has had a similar influence in the organization of tax departments in many companies, a matter requiring close and careful control, although economies from specialization have perhaps been an equally strong motive. Moreover, companies doing much business with the armed forces, such as the aircraft and electronics firms, have found it necessary in the interest of uniform policy to consolidate contract interpretation and performance under contracts into a service department.

Importance of service departments in the firm. Neither in the literature nor in the experience of business managers can one find substantial information [2] on the importance of service departments or on the means of measuring such importance. What proportion of the total expense budget should be allocated to service departments? What percentage of the total employment should one expect to find in the service groups? Is there such a thing as service departments growing too large? And, if so, what is their optimum size?

The answers to these questions and the practice of business firms in solving them may be revealed in future research. An analysis of such practices, the influence of time and circumstance upon them, and the way they differ between types of enterprise may conceivably result in the development of practical norms. And although these can never produce absolute answers, they will permit the comparison of a given enterprise situation with the normal practice for the appropriate industry and thus provide relative guides for management.

Since the service department is presumed to justify its existence by realized savings in the cost of getting a job done, the absolute answer theoretically ought to be found in the marginal approach to the problem. For instance, proposals for the enlargement of a service activity should be accompanied by analysis of the additional costs of alternative ways of providing the service or the cost of not having the service if it has not been provided in the past. Thus, a proposal on the part of the maintenance department to build a carpenter shop could be successfully analyzed to show anticipated net savings. The theoretical approach to this problem will give absolute answers if measurable data exist.

But the practical factors in the picture ruin all attempts to make successful analyses along these lines. There is the hurry at budget time that prevents proper substantiation of proposals; there is the host of assumptions made by proponents of the expansion—that, for example, in the long run it will pay, that morale will be improved, that other firms have taken this step, or that better service will be available. In the face of this barrage of arguments it is easy to see why the relative size of service departments grows during periods of expanding net profits, when resistance is low. There is little worry in the short run that overhead is creeping upward, that break-even points are skyrocketing. But this is, of course, the point of great danger. It takes a long depression to reduce effectively the overhead of service groups. Even relatively small decreases in business activity can quickly become embarrassing and create a risky situation for those firms that have succumbed to expanding appropriations for service groups.

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[2] An initial survey in one area may be found in "What Should Maintenance Cost?" *Factory*, vol. 111, no. 1 (January, 1953).

Besides the tendency toward empire building, there is another reason for the expansion of service activities, emphasized by Holden, Fish and Smith.[3] These writers make the point that service departments are *expected* to respond to any request with speed and adequacy of performance on the pain of suffering considerable criticism. As a consequence, service departments tend to expand their facilities in order to avoid this type of criticism, only to run into equally devastating remarks about their cost.

Functions of Service Departments

The functions of service departments, even those with the same titles, vary widely from time to time and from firm to firm. Neither a manager nor the management expert can safely assume that all personnel departments carry on the same set of activities. Similarly, wide variations in function are typical of accounting, real estate, legal service, traffic, general office service, engineering, maintenance, and purchasing. The manager or consultant must, therefore, first determine the exact function of a particular service group by learning what duties have been assigned and what power has been delegated both formally and informally to the service department manager.

Service to other departments. Service departments would hardly exist if they were not first created to perform a service for the major divisions. The maintenance department, for example, may furnish for all departments heating, ventilation, repair of the business premises, installation of equipment, and janitorial service. But whether this department should also be responsible for redecorating, internal modifications of the building, the purchase of small motors and their installation, relocation of power outlets, salvage, or equipment repair depends entirely upon the exact delegation of duties and of authority. Questions of the precedence of the various departments in receiving service would be determined in the same way.

One of the problems encountered in service departments is that the quality of the service performed for the several divisions within the firm may vary. It may be difficult, for example, to persuade the accounting department to provide for the sales or market research department a cost service similar to that it offers the manufacturing division. Or the centralized stenographic department may offer ample service to a top executive but feel less inclined to be as alertly useful to a minor manager or staff department.

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[3] P. E. Holden, L. S. Fish, and H. L. Smith, *Top-management Organization and Control* (New York: McGraw-Hill Book Company, Inc., 1951), p. 175.

The organization of a department for the purpose of performing certain services for all other departments is almost always accompanied by an edict that its service must be used. This provision makes considerable sense when it is understood that the cost of a service department is a fixed charge and any underemployment in such a department results in undue cost. Many business managers object to granting any department a monopoly of the service to be performed and are quick to complain of poor results and high costs. These dissatisfactions are a continuing source of contention in enterprises. Frequently they result in improvement, but they can also result in the destruction of the centralized service activity and either its decentralization throughout the company or its abolition in favor of buying the service from independent entrepreneurs.

It is not unusual for certain advisory duties to be delegated to service groups. When these functions are undertaken, they are performed in the same manner as that in which a staff group would undertake them. A maintenance or a traffic department frequently carries out an investigation and makes a recommendation to the proper authorities for the purchase of machinery, trucks and trucking facilities, or the transportation advantages of one location over another. A personnel department may be assigned the duty of investigating and reporting on the practices of leading business firms relating to executive training programs. The legal department may be required to study and recommend action relating to workmen's compensation. The general office manager may be asked to recommend action relating to the appropriate method of reproducing forms. And the real estate department may be charged with the duty of recommending action with respect to the prospective purchase of a warehouse.

The chief difficulty arising from the requirement that service departments also act in a staff capacity results from a misunderstanding of the power under which a specific action is taken. Service departments actually make the decisions that involve facilitating the operations of other departments. A manufacturing department may want to place a machine in a second-floor location. But a maintenance department can veto such action on the ground that the weight and vibration of the machine will create a hazard. Similarly, a legal department will determine how the clauses in a sales contract shall read; a traffic department will establish its own routes and select its own equipment for a given undertaking; and an engineering department will write the bill of materials. In all these areas, the power to make the decision rests squarely upon the service department. But when the same departments act in a staff capacity, they do so with power to investigate and recommend, but not to decide.

Usually disputes will not arise with respect to which power is being employed. On the other hand, there may be certain duties in which this distinction is not clear. For example, who is to decide what colors will be used in redecorating an office or a building? Clearly, the maintenance department is responsible for repair and upkeep. But does this also involve the selection or the recommendation of a color scheme? Many arguments have arisen over such matters.

A different problem is created where a power-oriented manager of a service department also has staff authority. Despite his restricted authority, he will naturally reach out for the decision-making power and will frequently obtain it by default. He may be especially energetic and efficient, in which case others may be happy and content with whatever action he may take. Or he may gloss over the distinction in situations where an overt act may create opposition.

Functional authority relationships. In many instances it is convenient to delegate functional authority to a service department. In such cases it is given a proscriptive right over certain phases of an activity being performed in other departments. For instance, the accounting department may have the functional authority to train and assign cost men for the factory. *How* their work is done is the responsibility of the accounting department, but in every other respect the cost men work for the plant manager, are paid by him, and conform to the same working conditions as other factory employees.

The grant of functional authority to service departments usually works well, although there is one exception. This involves the problem of divided loyalties. In case of a dispute between the factory and the accounting or personnel department, the cost or the personnel man has a difficult time deciding where he stands. He is supposed to be serving the factory in a manner that the parent service department cannot achieve and, consequently, may be expected to stand with the factory in the matter of improving the service facilities. On the other hand, his promotion may be in the hands of the main service department. Smoothing out these situations is truly a job for a diplomat, even though diplomacy may not have been regarded as an important qualification when the man was originally employed.

Nonmanagerial aspects of service departments. As in the case of all other grouped activities, many of the functions of service departments are entirely nonmanagerial in nature. The work of carpenters, clerks, painters, and typists is carried out in the same manner as if they were employed in a production, sales, or a finance division. With respect to their own departments, the managers of service activities do undertake the same managerial functions of planning, organizing, staffing, directing, and controlling as managers of line departments. But the *activity* of serving the operations of departments is entirely nonmanagerial in nature. Record-keeping, repairing, calculating, and transporting functions undertaken purely as an aid to other departments are simply "work." And it is exactly the same work that would be required in the total absence of service departments, since the essential feature of such departments is the grouping of *activities*.

PLACE IN THE ORGANIZATION STRUCTURE

So long as service activities remain undifferentiated, or are scattered throughout the organization structure, questions of good organization practice either do not arise or are relatively minor in importance. But at the point where the economies of grouped performance or the desirability of policy control begin to weigh heavily, managers must determine not only whether to organize a service department but also where to assign it in the organization structure. When the problem of servicing geographically separated units arises, a further complication ensues.

Independent versus subsidiary department. The practices of business managers in locating a service department in the organization structure of a firm are so widely diverse that no general rule can be derived from such empirical evidence as now exists. Personnel departments are found within production divisions or at the first level of departmentation. Accounting may be found within the treasurer's division or at the level of the functional departments. Legal departments may be independent and report to the chief executive, or they may be found within the controller's office or in the finance division. Maintenance and traffic alike may be assigned to the production or sales departments or may be independent of both. In the face of such various treatment of service groups can anything be said about the desirability of a given practice? Recourse to the principles of association will aid in differentiating between good and poor practice in a large number of cases. The following skeletonized charts, showing the major functional departmentation and the location of important service departments illustrate good organizational structuring in important areas of business activity.

Independent Medium-to-Large Department Store. The more common departmentized service activities in a retail store of this type include customer service, personnel, maintenance, and accounting. Good practice would dictate the arrangement in Figure 13. Accounting is here shown as independent of the other functions with the chief accountant reporting to the controller, who is normally delegated the duties of maintaining the financial records and developing the information required by other managers. The general superintendent is an important officer in department-store structuring. To him fall the duties of maintaining the physical facilities of the firm, managing the warehouse, making purchases of goods not for sale, and supervising store protection. It is customary to delegate to him such additional service activities as personnel, shipping and receiving, and customer service. All these activities are intimately associated in the sense that they contribute to the success of the main business of the firm, *i.e.*, to sell merchandise. The inclusion of customer service is a happy solution of a difficult problem, since it lends confidence that the policy governing the return of merchandise will be carried out impartially and with justice to both the firm and the customer.

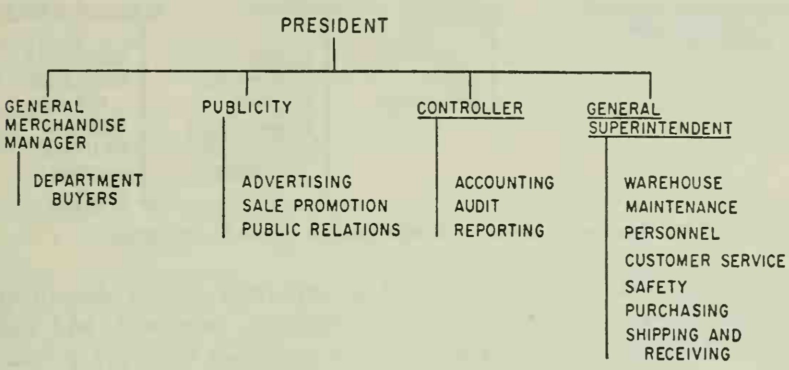
PRESIDENT
GENERAL MERCHANDISE MANAGER
DEPARTMENT BUYERS
PUBLICITY
ADVERTISING
SALE PROMOTION
PUBLIC RELATIONS
CONTROLLER
ACCOUNTING
AUDIT
REPORTING
GENERAL SUPERINTENDENT
WAREHOUSE
MAINTENANCE
PERSONNEL
CUSTOMER SERVICE
SAFETY
PURCHASING
SHIPPING AND RECEIVING

Fig. 13. Typical service organization in department stores.

The inclusion of the personnel activity reflects a decision that this function should be coordinated at a level just below that of the chief executive rather than in his office.

Independent Full-service Wholesaler. Good organization practice for this type of enterprise does not differ materially from that proposed for the independent department store. The basic reason is, of course, that both types of enterprise are in the business of buying for resale. Consequently, each requires the services of a merchandise manager, a controller, perhaps a treasurer, and a superintendent of facilities. This arrangement is illustrated in Figure 14.

The terminology that different types of wholesale firms employ to identify the departments suggested above varies widely. Those terms employed here are indicative of the activities normally assigned to the several departments. It is important to separate the controller from the treasurer because the one activity is a check upon the other. Consequently, the heads of these departments should report to the same superior. The service manager is delegated those activities that relate to the smooth operation of facilities. It is convenient for the president to have the responsibility for these functions centralized. Depending upon the number of employees and whether they are unionized or not, the assignment of the personnel service will normally be made either to the service manager or to an independent department. The latter solution is a good one if the director also has charge of negotiations with the union and undertakes the myriad activities relating to employee welfare. If neither of these factors is pressing, the personnel activity will ordinarily be the responsibility of the service manager.

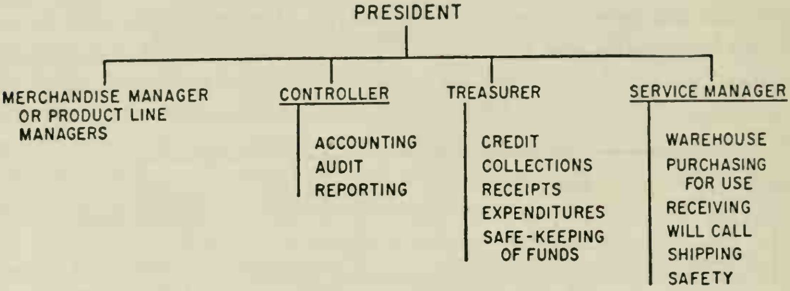
PRESIDENT
MERCHANDISE MANAGER OR PRODUCT LINE MANAGERS
CONTROLLER
ACCOUNTING
AUDIT
REPORTING
TREASURER
CREDIT
COLLECTIONS
RECEIPTS
EXPENDITURES
SAFE-KEEPING OF FUNDS
SERVICE MANAGER
WAREHOUSE
PURCHASING FOR USE
RECEIVING
WILL CALL
SHIPPING
SAFETY

Fig. 14. Typical service departmentation in wholesale enterprises.

A Manufacturing Establishment. The important service departments in manufacturing establishments are accounting, personnel, and maintenance. Their assignment in a typical organization structure is shown in Figure 15. The accounting service is best separated from the activities of the treasurer for reasons already stated. Since the heads of these departments should report to a common superior, smaller-type concerns secure coordination at the level of the president, but larger ones frequently install a vice-president in charge of finance to undertake this activity. The common practice of assigning maintenance to the production manager is largely due to the fact that most of the service for which

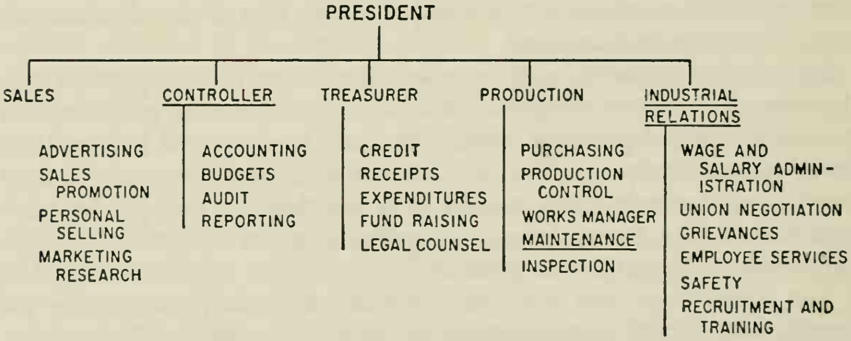
PRESIDENT
SALES
ADVERTISING
SALES PROMOTION
PERSONAL SELLING
MARKETING RESEARCH
CONTROLLER
ACCOUNTING
BUDGETS
AUDIT
REPORTING
TREASURER
CREDIT
RECEIPTS
EXPENDITURES
FUND RAISING
LEGAL COUNSEL
PRODUCTION
PURCHASING
PRODUCTION CONTROL
WORKS MANAGER
MAINTENANCE
INSPECTION
INDUSTRIAL RELATIONS
WAGE AND SALARY ADMINISTRATION
UNION NEGOTIATION
GRIEVANCES
EMPLOYEE SERVICES
SAFETY
RECRUITMENT AND TRAINING

Fig. 15. Service departmentation in a manufacturing enterprise.

he is responsible is performed for that department. The person in charge of manufacturing has the greatest interest in making certain that the maintenance activity is carried out efficiently and, for this reason, is likely to give it adequate supervision. It is more than probable that the other department heads, for whom the maintenance group also performs service, would neglect such an activity if it were assigned to them. Manufacturing enterprises have tended, in recent years, to detach the personnel department from the manufacturing division and require its head to report to some general officer. This practice is particularly likely to occur if the personnel director is also assigned the duty of negotiating with the trade union and handling union grievances. If he is merely concerned with record keeping, recruiting of labor, employee services, and plant safety, he will quite properly report to the production manager for the same reasons as were suggested for the maintenance service activity. In such a case, the production manager would carry on negotiations with the union.

Relationship between central and divisional service departments. In Figure 12 the successive steps by which a centralized service department emerges were illustrated in sections *A*, *B*, and *C*. Section *D*, however, illustrates a reversal of this trend. It shows an independent service department, together with subsidiary groupings in the major divisions of the enterprise structure. This development is exceedingly important in large-scale enterprises.

Reasons for Decentralization of Service Departments. The same calculus that pointed strongly to the economies of specialized service departments will yield a somewhat different answer when applied to larger enterprises. As a firm grows in size, the net advantage progressively favors an increasing degree of centralization in the service activity until an optimum is reached. When line department heads, however, find themselves charged with a rising cost for sustaining the accounting, personnel, and maintenance services, they are likely to question their value. And if, in addition, they feel that these activities are undertaken in an ineffective manner, that attention to their particular needs is lacking, and that they cannot get the kind of reports required for their operations on time, pressures arise that inevitably spell out the certainty of eventual decentralization of the service departments. It is important to note, however, that throughout this period of growing criticism no one is able to place a finger on the total cost of alternative ways to provide the necessary service. Even an accurate measure of observable costs fails to tell the complete story because of the many intangibles involved. One of the most interesting of these is the attitude of line and staff department heads toward service bureaucracies.

Businessmen are quick to recognize a striking parallel between the operating tendencies of service departments and the costly, rigid formalism in government. The private bureaucracy reaches its terrifying size, not in one fell swoop, but by minute accretions of function and procedure. It is here that the empire builder is seen at his best. The heads of these departments are quite free to propose further "services" from time to time, each of which is viewed marginally and is thus evaluated in terms of its particular contribution rather than in terms of the complete service that the department was created to perform. For instance, many added services can readily be created by an accounting, a personnel, an industrial engineering, or a traffic department. But the critical issue is their net help to the major departments. The basis for measuring such aid is its cost as compared with its over-all value. Viewed in this light, few bureaucracies could flower. Thus, the lack of adequate top-level supervision of service departments on an over-all basis, and the lack of adequate service standards create a no man's land wherein he who asserts that a service is needed is rarely opposed. The executive who criticizes the cost of the service knows full well that the whole department cannot be eliminated. Since he does not know just where the cuts should be made, he is inclined to favor a type of decentralization that will give him some control over the amount and cost of the service for which he pays.

Nature of the Relationship between Central and Divisional Service Departments. The bases upon which a centralized service department should be decentralized and its functions scattered among other departments are complex. Such an undertaking involves at least three areas of investigation: (1) Should a given service activity be decentralized among *all* other departments? (2) Should all the services performed be decentralized? (3) What should be the relationship between the decentralized services and the remainder of the centralized service department? One must turn to economic and management principles for a proper analysis of these issues.

Quite patently, the fragmentation of such service activities as traffic, purchasing, personnel, and maintenance among *all* departments is undesirable. The chief argument against this procedure is economic. For instance, the centralized recruitment of nonmanagerial personnel permits the economical use of advertising, the employment of skilled interviewers, and the full employment of centralized effort. The decentralization of traffic may result in the underemployment of high-cost equipment or in the use of less desirable apparatus. These are the economic reasons why company doctors and nurses are not assigned to finance, engineering, or sales departments and why company-owned automobiles are assigned to few persons in the production, personnel, or accounting departments.

On the other hand, the assignment of decentralized service activities to *some* departments is a feasible undertaking. A company that operates with a head office and two or more branch plants may have no centralized maintenance, personnel, or traffic department. Distance, time, and variations in the labor market may point to the economy of decentralization in these instances.

The problem of discriminating between the services of a given department for the purpose of decentralizing some but not others raises issues involving the quality, as well as the cost, of the service and problems of management. Few would deny the necessity of establishing a centralized accounting department. This is a service activity that involves financial and tax accounting for the firm, as well as the recording and reporting of information internally useful for decision making. Financial accounting should remain centralized in view of the realizable economies, the lack of direct interest in, and understanding by, the several department heads, the greater ease in achieving the proper policy interpretations, and the relative ease of coordinating it with other departmental areas. On the other hand, it is probable that the cost accounting activity should be decentralized, at least to the extent of the sales and manufacturing divisions. The typical and deplorable lack of appropriate production and sales cost data can be explained by the centralization of this service activity in a separate department, where the needs for accurate and timely information in major departments are not always understood. While it is not unusual for some types of cost reporting to be decentralized in the production division of a manufacturing company, it is extremely rare that a similar step is taken, or is permitted to be taken, by the sales divisions. It is little wonder that distribution costs remain indeterminate in so many manufacturing, wholesale, retail, and service establishments.

Similar issues are resolved in favor of decentralized service when the recruitment of salesmen is undertaken by the sales division, rather than by the personnel department; when the traffic department buys and services but does not control the use of automobiles for sales personnel; and when the production division trains and assigns service personnel to the sales division but does not control the activities that they perform.

The elimination of centralized service departments and the centralization of service activities represent the two extremes in the organization of these activities. The partial decentralization that is contemplated in the grant of functional authority is presumed to be middle ground. But it is an unstable compromise, giving rise to recurrent shifts in the degrees of authority over the decentralized service. The delicacy of the makeshift is beyond question.

Advantages of Partial Decentralization. The right kind and degree of partial decentralization of service activities can be attractive from several points of view. Complaints about poor service are usually forestalled. The decentralized unit comes to understand the vital importance of time, and it works with obvious good will to provide quick service. And, even where there is little improvement in the time factor, the line executive can be made to understand the reasons for the delay.

The allocation of service department overhead to an operating division is a source of continuous irritation. Comparisons are made, frequently on a subjective basis, between the amount of the uncontrollable charge and the value of the service received, much to the disadvantage of the former. The operating department heads admit that the service needs to be performed, but they are frustrated with their lack of control over its cost. Consequently, when decentralization does take place, the service personnel are in a position to emphasize their contribution to operations in a much more direct and forceful manner. And skill in doing this can result in allaying dissatisfaction with the amount of the service charge in the line-department budget.

A closely related, yet distinct, phase of the advantage of decentralization concerns the importance to the major department managers of getting control over the service function. There is no question but that the successive splitting off of activities is viewed with grudging concern by line executives. Aside from losing power in the enterprise, they also worry about the inevitable decline in the quality of coordination. Their feeling is confirmed by experience with the central service setup, and consequently the move to decentralize the activity again, even though on an entirely different basis from that on which it was originally allocated, is greeted with much satisfaction. For, once again, direct control over much of the activity will be reestablished; and this way of doing things is one that line men like.

There is, furthermore, still another advantage in decentralization. The line manager may confidently look forward to obtaining a special pleader in the centralized service department. For instance, the frustration that production and sales managers feel toward the controller's office is proverbial. The men often fail to understand one another, and the line often feels that it cannot get the needed information from the accounting department. The decentralization of the cost function can often result in a "friend at court." The cost personnel come to understand the production or distribution problems of the line executive, evaluate the necessity for different types of reports, different content, and better explanations of accounting practices, and are, perhaps, the very best people to represent these viewpoints in the centralized service department. This is a great advantage for those line managers—and there are legions of them—

who are not trained in the field of accounting and who are at a loss to deal with the man who creates the figures.

Dangers in Partial Decentralization. The advantages of partial decentralization of service activities are not without their counterparts, several of which have already been suggested. Functional authority relationships give rise to an obvious division of duties between the managers of the service and line departments in question. This difficulty becomes apparent as soon as the attempt to divide a service is made. After deciding to decentralize cost, the controller may draw up instructions relating to what cost data to gather and how and when to report it. But who appoints the cost representative? Suppose the production manager demands entirely different reporting of data, or new data? Who decides questions of pay rates and promotions of the cost representatives? And who fires him? These matters, typically ignored by those who delegate duties to the service representative, inevitably lead to recurring controversies.

There is also the danger that, once started, the trend toward decentralization of service will be permitted to go beyond the bounds dictated by savings in time, cost, and improvement in quality of service. The initial exuberance in establishing division service groups is sufficient to discourage a careful analysis of the complete cost picture. Consequently, underemployment of personnel and equipment and the use of inferior equipment are encountered in a discouraging number of cases.

Finally, there is the danger that the divided loyalties of the decentralized activity will not only lead to instability of the function but will also result in disaster for the personnel involved. The fact that, whenever contentions arise, such people are caught between the upper and nether stones of central service and line division underscores the human cost of decentralization. The ease or difficulty in getting raises in remuneration and promotion have a pronounced influence upon the welfare of the recipient personnel. The executives of the firm need to be fully aware of this possibility, lest the human cost be too high.

The Economics of Service Departments

Enterprise managers have a continuing concern with the economics of service departments. It is characteristic of service activities that their relationships to other departments and to the total activity of the enterprise are never settled. Circumstances that favor the growth of service activities can change radically as a result of the necessity for the enterprise to trim its sails in the face of changing economies of war, defense, and peace; of changes in the cyclical stage of business activity; of revolutionary innovations relating to products and their uses; and of the technological and organizational changes in the economic structure.

The costs and benefits of service departments. The business manager must evaluate the balance between the costs and benefits derived from service departments and decide whether the firm stands to gain from modifying the scope and duties of such departments.

Measurable and Unmeasurable Costs. The costs of operating a service department can rarely be set down in a neat row and summed. Much to the discouragement of economists, it is typical that many unmeasurable elements—among them poor communication, delays, failures to act, and simple arrogance—must be evaluated. The separation of service activities from other functions inevitably leads to poorer understanding on the part of the personnel in each group of the others' needs. Accounting departments, primarily concerned with the record keeping that facilitates their reporting of financial and tax information, sometimes overlook the needs of other departments for cost data. And, even though admitting the desirability of collecting and analyzing such material, this department, to the extent of its service activities, often demonstrates a lack of understanding of the need for reporting the information to other department heads in the most useful manner. These situations, encountered all too often in business enterprise, develop from the failure to realize that an accounting department should perform a tax and financial service for the total enterprise *and* provide available data in the most useful form for the other departments and their managers.[4]

Accounting departments are by no means the only service activities that suffer from poor communication. Many are those who have taken part in arguments between a requesting department that wants better lighting and the service manager who maintains that his meter shows that lighting is already normal. Or consider the personnel manager who insists upon interviewing salesmen despite the sales manager's obvious lack of confidence in the results. In these and many other situations that may arise, the service activity is fighting for its prerogatives, while the line department displays a critical opinion of the value of the results.

A second type of cost encountered when service departments are established involves delayed performance of the activity in question. Every business executive is conscious of the "poor" service he receives. This feeling is induced by recollections of delays in the receipt of cost or budget reports, the failure of a personnel department to maintain an active roster of immediately available personnel, and the frustrations of delayed installations or repairs of equipment by the maintenance department. Rarely is the cost of these delays actually calculated. Indeed, they may not be measurable at all. But this fact does not make the matter less real.

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[4] Some firms solve this issue by creating a new service department to perform the functions of reporting, analysis, and internal auditing.

Sometimes confusion arises concerning who should act in a given circumstance. Lack of clarity in the delegation of duties can be an expensive oversight when a job is neglected because no one is certain he should undertake it, a situation comparable to a ball dropping between two fielders because each thought the other would catch it. Efficient recruitment of employees with certain skills often goes untended because both the personnel and the line department heads thought the other was following through. And there is the production manager who complains that the maintenance department is giving poor service on a new machine when no provision has been made in the budget for this activity, since the manufacturer sold the equipment on a service basis in the first place.

A further type of unmeasurable cost involves a frequently encountered characteristic of bureaucracies—arrogance. It is unfortunate but true that the personnel in service departments occasionally develop an overbearing attitude toward other activities, a result usually of the political power of the service head within the organization structure. Lordly attitudes breed suspicion and opposition—circumstances that fit ill with the basic need of the activity to *serve* the line.

Finally, there is the measurable cost of overhead. A basic theory of service specialization is that the centralized department can perform an activity more economically than decentralized personnel. But few indeed are the departments that are established *after* a careful study of relative costs! The savings are taken for granted. With the passage of time, moreover, service departments tend to acquire further areas of service, with attendant provisions in the budget. Starting with few duties, a personnel department grows by the successive additions of other activities such as interviewing, interdepartment transfers, safety, cafeterias, and recreation. A maintenance department soon blossoms out with a machine shop of its own, a carpenter repair facility, electric shop, and storage facilities. These accretions are requested and approved, one by one, on the ground that other companies do these things or that higher morale or better service will result. Such assertions often are not documented. And, in the rush to get the enterprise budget approved, the top managers often fail to insist upon cost data to substantiate claimed savings. No one stops to consider the *total* outlay for service or the relative growth of service to line departments. Indeed, there is little use, since no one knows how large a service department should be permitted to grow! But the effect of growth is certain. It lies in the burden charged to operating departments.

Benefits of Service Departments. Since service departments may be justified on the basis of savings in cost as compared with other methods of performance, it is quite clear that the valuation of benefits is exceedingly important. Among these are skilled service, adequate attention, and the smoothing out of fluctuating needs.

It is an economic truth that the centralization of performance permits the employment of specialized skills. Fundamentally, centralization means bringing to a point a group of activities that are scattered through the organization structure. For instance, the centralization of recruiting, interviewing, and testing in a personnel department brings to one place a volume of work that makes it economical to employ experts on a full-time basis, in contrast with the sporadic, part-time, seasonal attention given the activities in question by personnel employed for entirely different purposes. Thus it is probable, although unproved, that centralized performance of the activities by specialists is achieved at lower cost compared with the value received than would be possible if the service were not centralized.

The possibility of getting adequate attention paid to the performance of a given service through the centralization of the activity is a complex idea, for what is "adequate" is difficult to define. It is generally possible to view the matter as one in which the service department has the manpower and the time to carry out properly a given duty. For instance, it is said that a personnel department can give adequate attention to testing, whereas other departments would probably neglect this work. But the matter is not disposed of so easily. It is clear that any department that had the budget for this function could give as much attention to it as the personnel department. This is also true of such other elements as the amount of time spent on an activity and the timeliness of such attention.

Finally, the benefit received by ironing out uneven demands for certain types of service can be exceedingly valuable. The maintenance department in a factory is a good example. Seasonal changes in weather lead to changing emphasis on certain types of work performed by maintenance. Winter conditions call for special attention to heating, humidity, and lighting service. Summer permits an emphasis on painting, cleaning, and construction. If the same work force can be utilized to carry out these activities, steady annual employment can be furnished to a given complement of men.

Evaluation of Costs and Benefits. The importance of making a determined effort to weigh the cost and benefits of a given service cannot be stressed too much. It is true that the haste in approving expansive budgets for service departments permits the specious arguments, generalizations, and hazy references to savings to go unchallenged. This haste is particularly likely during a succession of good business years, when the enterprise can afford luxuries, or during periods of excess-profits taxes, when businessmen may be tempted to approve expanded service budgets purely because they can be financed on an 18-cent dollar. So many are the intangible costs and benefits present that accurate evaluations are literally impossible.

But these are the very reasons why every proposed expansion should be analyzed with great caution. Lack of attention to this matter permits the growth of overhead to the point where the firm has to do an enormous business in order to stay even. The appalling danger is, of course, that heavy fixed costs will cause undue embarrassment to the firm in the face of even moderate recessions.

The economics of purchased versus owned services. To this point, attention has been directed to the internal problems involved in the organization of service activities. Various ways of handling this matter have been considered, but always with the emphasis on tangible and intangible savings and on policy control. There is, however, an additional organizational alternative available—the possibility of purchasing the service from another firm. The inclusion of this alternative requires an analysis of the factors involved from the viewpoint of the possible net savings that may be realized.

Factors in the Analysis of Savings Realizable through Purchased Services. In the analysis of the issue of purchasing rather than owning the required enterprise services, there are several measurable cost elements to be considered.[5] One is the savings in the direct cost of operating a service activity, as compared with hiring another firm to undertake the same service. Since present or projected service-department expense and capital budgets are readily available, they may be directly compared with the bids of outside firms. Under these conditions there can be no room for doubt about the realizable savings, if any.

One factor in direct cost sometimes overlooked is the service provided for in the purchase contract with suppliers and included in the price of the equipment. This is a practice of many manufacturers in the sale of expensive machines; consequently, the cost of training employees to use the equipment and the cost of maintaining it should be omitted from all considerations of service costs, whether it is proposed to provide or buy the needed help.

Many arguments have been made that purchased service involves heavy losses because of time lost waiting for the agency to come and repair defective equipment. Basically, of course, this is a question of the value of lost time and the quality of service available. The proper approach is to determine whether in fact there are greater delays in purchased service than in owned service and then calculate the value of the net loss in time. This argument is particularly appropriate in the case of maintenance service on production equipment. It is claimed that, when the machines go down, a whole section of productive activity stops and that this is expensive. It is by no means certain, however, that an internal maintenance department would actually be on the job sooner than the purchased service. Maintenance groups make appointments and develop time schedules for providing service, and while it may be true that production will carry top priority, this does not mean that service can be given promptly, since the men may be involved in other assignments or may have to wait for parts. It is also worthwhile to note that business firms habitually purchase certain kinds of service—that for typewriters and electronic equipment, for example—on a stand-by basis. Finally, once the net differential in lost time can be calculated, it is an easy matter to figure the cost of the net loss. Unless this is substantial, it does not provide a proper basis for preferring owned service.

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[5] "Auto Leasing Scares the Dealers," *Business Week*, June 21, 1952.

Another calculable cost savings between owned and purchased service concerns the frequency of the required service. It is clear, for instance, that legal counsel needed but a few times a year is much too expensive to provide within the firm. Similarly, some enterprises have little use for transportation equipment except at odd times. The prospective service must, at a minimum, be needed in sufficient volume to occupy the full time and attention of at least one person, and possibly more, from one year to another. Full employment for short periods is not enough. If it be argued that full employment is unnecessary because personnel may be assigned other tasks, the answer is that the employed skills are likely to compare very unfavorably with those available from outside firms. It is for this reason that the quality of the internal service is likely to suffer.

A final measurable cost concerns the burden of service expense. This is an overhead cost if the service is owned. As explained in previous sections, it is difficult to control the growth of owned service, and enterprises find it hard to cut down an overhead of this nature. The firm that purchases the service is not hampered at all with this problem. The kind and amount of service is contracted for; it is an operating, and not an overhead, cost of doing business; and it can readily be dispensed with or postponed whenever it is in the interest of the buyer to take such action. Thus, as a firm approaches a cutback in its business, it is indeed in an enviable position if it has purchased services rather than owned them.

There are, on the other hand, certain unmeasurable costs that require attention. These would include the matter of undivided attention of the service activity, the importance of knowing what service to ask for, and relative managerial skill. The service that is made available by outside firms usually does not belong to any one customer. For instance, an enterprise selling accounting service to other firms is interested in having several customers. Now, the complaint made against such service is that customers fail to receive adequate attention from skilled specialists. This complaint may be quite legitimate. But the entailed loss is probably unmeasurable.

Another factor that is difficult to handle involves the problem of what a firm should ask a service to do. This is by no means an unusual case. The managers of nearly all enterprises are in a quandary at one time or another of not knowing what to expect of a personnel, accounting, legal, traffic, or other service group. In the main, this difficulty is the result of a lack of understanding of what the service is capable of doing and of how to use it in the most effective way. For instance, through lack of training, relatively few business managers understand the important services that a controller can perform. Unfortunately, the controller may not know, either. Unless divisional managers know what to ask for in the way of form and content of reports, they may not get them. On the other hand, it is probably true that a manager can always get the purchased service he needs by knowing what he needs and insisting upon getting it.

From some points of view it may be considered strange that there are differences in the managerial skills between the owned and the purchased service activities. Nevertheless, the firm that wants to provide its own service may have great difficulty in finding a manager for the activity as skilled as the managers of outside service firms. This is not at all infrequent in the case of legal, insurance, tax, real estate, and other services and may also be true with respect to certain aspects of personnel, maintenance, and accounting. In any case, the value of the relative managerial skills is largely incalculable.

Practical Applications. It is apparent from a review of the factors affecting the selection of owned or purchased services that there are no general rules that can be summoned for a quick solution of the problem. It is not possible to say that any particular service should be purchased. Each question requires individual analysis and should be decided on its particular merits. But the framework of the correct *procedure* is both clear and applicable to all service activities. The first step involves the careful calculation of the measurable costs of owned versus purchased services and the determination of the net savings to the firm. The second step consists of the painstaking analysis of the unmeasurable relative costs of the alternatives. The third step requires the comparison of the results and an exercise of judgment to reach a decision in the best interests of the firm.

In the situation where the contemplated service is *in addition to* activities currently performed by either an owned or a purchased service, the same scientific approach is essential. However, this case differs with respect to the nature of the costs in question. The important costs here are marginal and should be calculated in terms of the added expense with respect to each alternative. For instance, a firm with an owned personnel department may face a need for a training service. The question arises whether to add this activity to the department or whether to purchase the added service from an outside organization. On the basis of the relative costs involved, the decision may go either way.

Selected References

Dale, E., *Planning and Developing the Company Organization Structure*, Research Report 20, pp. 72–73. New York: American Management Association, 1952.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control*, Part C, Sec. 2. New York: McGraw-Hill Book Company, Inc., 1951.

Newman, W. H., *Administrative Action*, Chap. 9. New York: Prentice-Hall, Inc., 1951.

"What Should Maintenance Cost?" *Factory*, vol. 111, no. 1 (January, 1953).

II

CENTRALIZATION OF AUTHORITY

A fundamental problem of organization that must be continually dealt with concerns the degree to which authority should be concentrated or dispersed throughout the organization. It is a question, not of *what kind* of authority, but of *how much* authority is delegated to subordinates in an organization. No executive can unilaterally be for or against centralization. The propositions are always in terms of "more or less"—in terms of "how much" and not "whether."

The problem of centralization of authority is consequently a fundamental phase of the principle of delegation. To the extent that authority is not delegated, it is centralized. There are seldom absolutes in centralization and decentralization. It is conceivable that there may be absolute centralization of authority in a given person, but when this occurs, no subordinate managers are created, and no organization exists. Therefore, it can be said that some decentralization is a characteristic of all organization. There cannot be absolute decentralization of authority, for if a manager should delegate *all* his authority, his status as a manager would cease, and his position in the organization structure would, in fact, be eliminated. Centralization and decentralization are, therefore, tendencies; they are qualities like "hot" and "cold."

As one scholar[1] has put it in explaining the nature of decentralization in a company, it may be said that the degree of managerial decentralization in a company is greater:

1. The greater the number of decisions made lower down the management hierarchy.
2. The more important the decisions made lower down the management hierarchy. For example, the greater the sum of capital expenditure that can be approved by the plant manager without consulting anyone else, the greater the degree of decentralization in this field.
3. The more functions affected by decisions made at lower levels. Thus companies which permit only operational decisions to be made at separate branch plants are less decentralized than those which also permit financial and personnel decisions at branch plants.
4. The less checking required on the decision. Decentralization is greatest when no check at all must be made; less when superiors have to be informed

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[1] E. Dale, *Planning and Developing the Company Organization Structure*, Research Report 20 (New York: American Management Association, 1952), p. 107.

of the decision after it has been made; still less if superiors have to be consulted before the decision is made. The fewer people to be consulted, and the lower they are on the management hierarchy, the greater the degree of decentralization.

Centralization has been used in business and other enterprises to describe tendencies other than the dispersal of authority. A common use of the term is to speak of centralization or decentralization of performance. In this sense, it is a problem of geography of activities; a business characterized by centralized performance is one in which activities are carried on in a single location or under a single roof. Centralization often is used, furthermore, with reference to departmental activities. Thus, the establishment of service divisions may be regarded as a centralization of similar or specialized activities in a single department. But when the problem of centralization is discussed as an aspect of the management problem, it is likely to refer to the tendencies to withhold or delegate authority in an enterprise and the dispersal or concentration of decision making.

Factors Determining the Degree of Delegation of Authority

As already noted, a manager cannot ordinarily be for or against centralization or decentralization of authority. He may *like* to delegate authority, or he may *like* to make all the decisions himself. A well-known despot in a certain large enterprise in this country, who would like to make all the decisions, finds that he cannot. Even the autocrat in a smaller enterprise is often forced to delegate some decision-making authority to his subordinates.[2]

Although the temperament of individual managers will affect the extent to which authority is delegated, there are discernible factors that will determine the extent of centralization. Some of these grow out of the kind of management which heads (and has headed) the enterprise, but most of them are beyond the control of the individual manager. One manager may resist the influence of these factors, while another may recognize them and determine his delegation policy accordingly; no one, however, can ignore them and manage effectively.

Costliness of the decision. Perhaps the overriding factor determining the desirability of managerial decentralization is, as in other managerial and policy matters, the criterion of costliness. As a general rule, the more costly a decision will be to a company, the more probable that it will be made at the upper levels of management. This cost may be reckoned directly in dollars and cents, or it may be reckoned in such intangibles as the company's reputation, its competitive position, or the effect on employee morale. Thus, one will find the decision on purchase of airplanes in an airline business will be made at the top levels, while the decision on the purchase of desks will be made in the second or third echelon of the purchasing department. Quality control in a drug manufacturing business, where a mistake might endanger the company's reputation, would normally report at a high level, while the inspector of quality in a toy manufacturing business might report at a much lower one.

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[2] *Business Week*, Sept. 6, 1952, pp. 182–194, ran a feature story on the president of a $50,000,000-a-year rayon converter who apparently disproves "what the books say" by not delegating decision making. Yet, even though this president undertakes a surprising amount of detailed decision making, the article quotes cases of his disposing of callers by saying, "See my advertising manager," or "Talk to Marty."

The fact that, the higher the cost of a mistake, the less likely the power of decision to be decentralized is not necessarily based on the assumption that top managers are less likely to make mistakes than lower ones. It is true that they are less likely to do so, since they are probably better trained and in better possession of the facts. But the controlling factor appears to be the weight of responsibility. As has already been seen, the manager who delegates authority does not delegate responsibility. Therefore, if the results of a mistake should be of crucial importance, the manager may properly believe that he cannot delegate authority for decision making.

On the other hand, this concept must be applied cautiously and, in large companies, sparingly. There is a danger that a manager may fear to delegate *any* authority for decision making and may exaggerate the dangers and costs of mistakes by subordinates. An overburdened manager who does so may cause greater costs from delay or indecision than the costs he hopes to avoid by withholding decision-making power from subordinates. Although it cannot be proved statistically, experience supports the conclusion that top managers often incur higher costs by attempting to centralize too much authority and thereby permitting subordinates to drift without clear-cut decisions than they would by taking the risk of permitting subordinates to make decisions for them.

Areas of decision differ as to the need for direct control. In the typical large business, top management may reasonably feel that it cannot delegate authority over the expenditure of capital funds. It has sometimes been said that the one thing management cannot delegate is control over dollar bills. A business can go bankrupt for lack of cash, despite a showing of profits by the income statement, for the availability of cash for operations and capital expansion is decisive in business existence.

For example, reference to the organization chart of the General Motors Corporation shown in Figure 11 will disclose that the financial aspects of that company's operations are largely centralized under an executive vice-president, who reports primarily to the board of directors rather than to the president. This is a living example of the importance of directness of control in this area. Where direct control is required over any aspect of a manager's duties, this control will naturally be an influence toward centralizing authority.

Uniformity of policy. Another, and somewhat related, factor favoring centralization of authority is the desire to obtain uniformity of policy. Consistency in this regard is a desirable characteristic, and those who value it above all are invariably in favor of centralized authority, since this is the easiest way of achieving such a goal. These protagonists may wish to be sure that customers will be treated alike with respect to quality, price, credit, delivery, and service. They wish to ensure that the same policies are followed in dealing with their vendors. They may believe that, throughout the area served, enterprise policies with regard to public relations should be standardized.

Strong claims for uniform policy are also made on the basis of certain internal advantages. For instance, standardized accounting, statistics, and financial records make it easier to compare relative efficiencies of departments and keep down costs. The administration of a union contract is facilitated if the firm has one policy with respect to wages, promotions, vacations, dismissals, and similar factors. The problems with taxes or with government regulation may also be handled with fewer worries and fewer chances for mistakes if uniform policies can be enforced.

A mere recitation of the need for uniform policies and the advantages of them may lead one to believe that there can be no opposite opinion on this score. But many enterprises go to considerable length to make sure that many policies will not be uniform at all. When a firm organizes on a product or territorial basis, or opens plants in other parts of the country in order to take advantage of dissimilar situations with respect to labor, customers, sources of supply, or trade practices, it obviously prefers at least some nonuniformity in certain important policies. And when a company decentralizes authority to encourage individual initiative, certain business policies may be as varied as the individual managers make them. Many companies encourage this variety on all except major matters, knowing that out of such nonuniformity may come managerial innovation, progress, competition between organizational units, improved morale and efficiency, and a supply of promotable managerial manpower.

Economic size. One of the major diseconomies of large size is the difficulty of welding human resources into an efficient and effective team. The larger the size of a firm, the more are the decisions which ordinarily must be made, and the greater is the problem of coordinating them. The larger the firm, the greater are the number of departments and levels. These complexities of organization may require policy questions to be passed up the line and discussed not only with many managers in the chain of command but with many managers at each level, since horizontal agreement may be as necessary as vertical clearance.

In a case in one large American railroad, a local freight-traffic representative saw an opportunity for the carrier to make a handsome profit in the handling of race horses, if they could be carried in special cars on fast passenger trains. The horse owners were concerned, not so much with cost, as with fast and convenient service. But since no procedures had been established for this kind of service, the local trainmaster did not wish to take the responsibility of interfering with passenger-train movement. The proposal, therefore, had to be discussed locally with the passenger-traffic and operations managers and then referred upward through the echelons of the operations and traffic departments to a point where a decision could be made. In this case, that point was the president of the railroad! One might contrast the simplicity of decision making of the owner-operated trucking company, which, incidentally, obtained most of this business that this particular railroad lost.

The slowness with which decisions can be made and the number of specialists and interested managers who must be consulted is a costly process in the larger-sized business. In order to minimize this cost, the latter must decentralize authority to the greatest extent possible. The top manager of a large business has, in reality, little choice but to decentralize. Indeed, the large enterprise that prides itself on decentralizing decision making is recognizing the inevitable, although the extent of decentralization and the effectiveness with which it is done may differ widely among companies, depending largely upon the quality of their management.

Just as the diseconomies of size are often traceable to the complexities of decision making, they may be reduced by breaking up the large enterprise into a number of nearly autonomous groups. This is, of course, a technique of decentralization. Considerable increases in efficiency are likely to result from making the decision-making unit small enough that its top executives can be near the point where the decisions must be made. This nearness makes possible speedy decisions, saves the time of executives who would otherwise spend considerable effort in coordinating their decisions with many others, reduces the amount of paper work, and tends to improve the quality of decisions by reducing their magnitude to manageable proportions.

Exactly what this size is cannot be arbitrarily stated. Some astute managers believe it to be 1,000 persons, others believe it to be closer to 100 or 250, and some would hold that a group of 2,500 employees can be broken into manageable departments, each with considerable decentralized authority.[3] In any case, there is evidence that, where the unit exceeds this range of size, the distance from the top to the bottom may impair the quality and speed of decision making.

Also important to the size of the major and subordinate decision-making units is the character of the unit. For decentralization to be thoroughly effective, the unit must possess a certain economic and managerial self-sufficiency. A functional department, such as sales or manufacturing, ordinarily cannot be as independent as product or territorial departments. A department of 1,000 engineers or salesmen usually cannot be the effective independent unit that product or territorial departments of the same size can be, encompassing as they do nearly all the functions of an enterprise within their bounds. It therefore follows that, if the diseconomies of size are to be reduced by decreasing the size of the self-contained decision-making unit, it is preferable to departmentize a company along product or territorial lines.

In the zeal to overcome the disadvantages of size by reducing the decision-making unit, certain shortcomings of decentralization should not be overlooked. When authority is decentralized, a lack of policy uniformity may follow, and the required degree of coordination may be lacking. The branch or product division or other self-sufficient unit may be so preoccupied with its objectives as to lose sight of those of the enterprise as a whole. What headquarters executive has not had the feeling that a division or a branch is at times "running away with the company"! Independence may mean, too, that the talents of top line and staff executives and their departments are not being effectively utilized by the decentralized units. The experience and training of these top officials and specialists are usually valuable and expensive business assets, the use of which can often prove of great value to the subordinate managers in an enterprise.

In order to balance the advantages and disadvantages of decentralization in large-size enterprises, careful organizational and policy definitions are required. While top executives of a large company cannot afford to decentralize authority too little, neither can they afford to lose control of the business. There are many devices for obtaining required policy uniformity and maintaining needed central control. The authority necessary to do so must be retained at the top of a company if chaos is to be avoided and the attainment of enterprise objectives assured.

Decentralization of performance. Centralization or decentralization of performance is basically a technical matter depending upon such factors as the economies of division of labor, the opportunities for utilizing machines, the nature of the service to be performed (thus a railroad has no choice but to decentralize its performance), and the location of markets for raw materials, labor, and consumers. While the centralization may be geographical or physical in nature, its extent has a major influence on the concentration of authority.

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[3] For a discussion of this point, see *Problems and Policies of Decentralized Management*, General Management Series, No. 154 (New York: American Management Association, 1952).

Authority tends to be decentralized when performance is decentralized, if for no other reason than that of the inability of an absentee manager to manage, although exceptions to this tendency do exist. For example, some of the large chain-store organizations are characterized by widely decentralized performance; yet the local manager of a store may have no authority over pricing, advertising and merchandising methods, inventory and purchasing, or product line, all of which may be controlled from a central or regional office of the chain. The head of a local manufacturing plant of a large organization may have little authority beyond the right to hire and fire, and even in these cases he may be circumscribed by company policy and procedure and by the requirements of a centralized personnel department. At the same time, the decentralization of performance places limits upon the ability to centralize authority. The most despotic top manager of a national organization cannot supervise his San Francisco store or plant as closely as he could if it were adjacent to his New York headquarters office.

It does not follow that a business whose performance is centralized will have authority centralized as well. It is true that authority can be more easily centralized if the operations of a company are in the same location and that, if a company wishes to keep tight control over the decision-making process, it will be more successful in doing so where performance is centralized. But there are too many other factors in centralization of authority to give geographical concentration a controlling influence.

Business dynamics. The dynamic character of a business will also affect the degree to which authority can be decentralized. If a business is growing fast and facing complex problems of expansion, the managers in it, particularly those responsible for top policy, may be forced to make a disproportionate share of the decisions. But, strangely enough, this very dynamic condition may force the managers to delegate authority and take a calculated risk on the costs of error. Generally this dilemma is resolved in the direction of delegation, and, in order to avoid delegation to untrained subordinates, close attention is given to rapid formation of policies and accelerated management training. An alternative often adopted is to slow the rate of change, including the rate of that tempting change, expansion. Many managers have found that the strategic factor limiting their ability to meet change and expand a business is the lack of trained personnel to whom authority may be delegated. Often, also, authority is delegated to untrained and undirected hands in order to meet the requirements of change, with the recognized future task of taking in the reins and rectifying mistakes when the pace of change has slowed.

In old, well-established, or relatively static businesses, there is a natural tendency to centralize or recentralize authority. Where few major decisions must be made, the advantages of uniform policy and the economies of having a few well-qualified persons to make the decisions tend to dictate that authority be centralized. This tendency may explain why in many banks and insurance companies, as well as in certain railroads, decentralization of authority is not very extensive. Nevertheless, in businesses not affected by change there may be dangers in too much centralization. New discoveries, vigorous competition from an unexpected source, or political change are only a few of the casual factors that might introduce dynamic conditions in an industry. And when this occurs, the centrally managed firm may not be able quickly to meet a situation requiring decentralized decision making.

History of the enterprise. Whether authority in a firm will be centralized frequently depends upon the way the business has been built. Those enterprises that, in the main, expand from within, such as Marshall Field and Company and International Harvester Company, show a marked tendency to keep authority centralized, as do those that grow large under the direction of the owner-founder. The Ford Motor Company was, under its founder, an extraordinary case of centralized authority, with Henry Ford, Sr., priding himself in having no organizational titles in the top management except that of president and general manager and requiring, to the extent he could, that every major decision in that vast company be made by himself.

On the other hand, enterprises that represent amalgamations and consolidations are likely to show, at least at first, a definite tendency to retain decentralized authority, especially if the unit acquired is operating profitably. To be sure, this tendency not to rock the boat may be politically inspired rather than based on pure managerial considerations. Certainly, the claim on autonomy of the once-independent units is especially strong, and a full managerial generation may have to pass before the chief executive of the amalgamation may dare materially to increase the degree of centralization.

On the other hand, it may be that the first influence of an amalgamation or consolidation is to increase the degree of centralization. If the controlling group wishes to put in its own management or take immediate advantage of the economies of combined operation, it may find that the requirements of policy uniformity and quick action necessitate centralization.

Desire for autonomy. It is a characteristic of individuals and of groups of individuals to desire a degree of independence. A region may resent absenteeism. Observe the hostility of the Chicago Board of Trade and the Chicago newspapers toward the absent managers of its railroads during the fifty years prior to World War I; the establishment of twelve Federal Reserve banks to meet regional banking needs; the exasperation of branch managers with their head offices.

An individual may be frustrated by the delay in getting a decision, by long lines of communication, and by the great business game of passing the buck. This frustration can lead to dangerous loss of good men, to jockeying by the office politician, and to resigned inertia by the less competent seeker of security.

These are evidences of the desire for recognition, for status, for autonomy. The business manager, no less than the politician, cannot ignore them. They point to, and require, some delegation of authority.

Decentralization and the availability of managers. In earlier paragraphs the scarcity of managerial manpower was mentioned. This shortage necessarily limits the extent of decentralization of authority, since dispersal of decision making and leadership assumes the availability of persons who can discharge the obligations arising from authority. But altogether too often the mourned perennial scarcity of good managers is used as an excuse for the centralization of authority, and the executive who complains that he cannot delegate because he has no one who can properly handle his authority is sometimes merely magnifying his own value to the firm.

There are managers, also, who believe that a firm should centralize authority because, by doing so, it will need very few good managers. Indeed, *if* the managerial job can be done effectively and efficiently, savings will result. The only difficulty is that the firm that so centralizes authority does not have the conditions within itself for training managerial manpower to take over the duties of the centralized top managers. External sources are then relied upon to furnish the necessary replacement of top managers, on the assumption that someone already trained by another firm can be bought at a price.

The key, of course, to ability to decentralize safely is adequate training of managers. By the same token, decentralization is perhaps the most important key to training. Many large firms whose size makes decentralization a necessity consciously push decision making down into the organization for the purpose of developing managerial manpower. The best training for managership is actual experience in managing. If, as is usually the case, this gaining of experience carries with it chances for mistakes by the novice, it is good practice to limit the area of importance of the new manager.

Control techniques. A factor affecting the degree of centralization is the state of development of control techniques. One cannot expect a good manager at any level of the organization to delegate his authority unless he has some means for assuring himself that the authority will be used as he intended. The lack of knowing how to control often explains a manager's unwillingness to delegate authority. For this reason, he is often perfectly correct in believing that it takes him more time to unmake mistakes or make sure that a job is being properly done by subordinates than it would take to do the job himself.

Coupled with the manager's need for understanding and utilizing appropriate control techniques is the state of development of these techniques themselves. Improvements in statistical devices, accounting controls, and other techniques have made possible the current trend toward extensive managerial decentralization. Even the most ardent supporters of decentralization, such as General Motors, du Pont, and Sears, could hardly take so favorable a point of view toward it if adequate control techniques were not available to show management from the top down how well events are conforming to plans. To decentralize is not to lose control, and to push decision making down in the organization is not to destroy responsibility.

The philosophy of management. As is true with other aspects of management, the character of top leadership and the philosophy held by it will have an important influence on the extent to which authority in an enterprise is centralized or decentralized. Sometimes this leadership finds in decentralization a means to make big business work. Sometimes the top manager is despotic, brooking no interference with the authority and information he jealously hoards. At other times, the top leader is a man who keeps authority, not merely for the gratification of his desire for status or power, but because he simply cannot give up the activities and authorities he held before he rose to the top or before his business expanded from an owner-manager shop.

In still other cases, the top management may see decentralization as a way of organizational life that takes advantage of the innate desire of men to create, to be free, and to have status. And many successful top leaders find in it a means to harness the desire for freedom to the gaining of economic efficiency, much as the free enterprise system has been responsible for this country's remarkable progress. As an example of this attitude, attention may be called to the thinking of Robert E. Wood, chairman of the board of Sears, Roebuck and Company, who has said: [4]

> We complain about government in business, we stress the advantages of the free enterprise system, we complain about the totalitarian state, but in our

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[4] Quoted in Dale, *op. cit.*, p. 116.

industrial organizations, in our striving for efficiency, we have created more or less of a totalitarian organization in industry—particularly in large industry. The problem of retaining efficiency and discipline in these large organizations and yet allowing our people to express themselves, to exercise initiative and to have some voice in the affairs of the organization is the greatest problem for large organizations to solve.

Environmental influences. Most of the determinants of the extent of decentralization dealt with so far have been interior to the firm, although many, such as the economics of decentralization of performance and the character of business dynamics, include elements well beyond the control of an enterprise's management. In addition, there are definite external forces that tend to mold the extent of decentralization of any enterprise. Among the most important of these are government controls, national unionism, tax policies, and government purchases.

Government controls of business, with their regulation of many facets of business policy, make it difficult and sometimes impossible for a firm to decentralize authority. If a firm's prices are subject to regulation, the sales manager cannot be given much real freedom in determining them. If its materials are subject to government allocation and restriction, the purchasing and factory managers cannot be given freedom to buy or use them. If a company's labor may be worked only a limited number of hours at a minimum rate of pay, the local division manager cannot be given freedom to determine these matters.

But the restriction on decentralization goes further: in a real sense, the top management itself no longer has authority over these controlled aspects of business policy and cannot, therefore, delegate authority it does not have. Nevertheless, government regulations are ordinarily not so detailed as to take *all* authority over the subjects controlled but only to place certain maximum and minimum limits over their use. Much authority could still be decentralized. But the manager often does not dare to trust his subordinates with interpretation of government regulations, especially since the penalties and the public opprobrium for breaking the law are so serious and since the interpretation of lawful behavior is a matter for the specialist. Therefore, the manager is often forced to centralize this portion of authority.

In the same way, the rise of national unions in the past three decades has had a centralizing influence on business. So long as the departmental or divisional manager may control the terms of the labor contract, either by dealing with local unions or by dealing with employees directly, these matters may be delegated by top management to these subordinates. But where a national union enters a collective-bargaining contract with the headquarters management of a firm, with the terms of the labor contract applicable to all workers of a company wherever located, the company can no more chance decentralization of decision making in this field than it can in the case of government controls.

Although designed for revenue-collecting purposes, rather than for regulatory purposes, the tax system of the national, state, and local governments has had a marked regulatory effect on business. The tax collector, especially the Federal income-tax collector, sits at the elbow of every business executive who makes a decision involving funds. As a matter of fact, with high rates applicable to corporate income, the impact of taxation is often a policy-determining factor that overshadows such traditional business considerations as plant expansion, marketing policies, and economical scale of operations. Uniformity of tax policy becomes a consideration of primary importance to a company management. This influence spells centralization because the manager without appropriate tax advice cannot otherwise be expected to make wise decisions involving profits.

Likewise, the tremendous volume of government purchasing of materials, supplies, and services has a centralizing influence on business. The government is no ordinary purchaser. Its specifications are exacting, its volume often determines the existence of a firm in business, and its purchasing tends to be centralized. These factors make it difficult for a firm to deal with the government except at a high level in its organization; consequently, much authority in this area is centralized.

Recentralization of Authority

As has been noted, at times an enterprise can be said to recentralize authority—to centralize authority once decentralized. This process is normally not merely a reversal of that of decentralization, for the authority delegations are not wholly withdrawn by the various line managers who made them. What occurs is a centralization of authority over a certain type of activity or a certain kind of function, wherever in the organization they are found.

Thus, the growing importance of taxes, the requirements of uniform labor policy, and the necessities of regulation may mean that authority over the aspects of company operations necessary to accomplish these objectives will be recentralized, or concentrated in a department with functional authority over them. This recentralization may also occur in an enterprise when, through growth and extensive decentralization, the top management may feel that it has lost control over the business. Or, if a business falls on difficult times, the management may wish to reinforce its authority over the expenditure of funds, the level of costs, or the character of sales effort. In these cases, top management may establish a control staff with functional authority over certain kinds of decisions of subordinate managers. Such recentralization, sometimes temporary, often becomes permanent. Many top managers take pride in the effectiveness of their cost control, budget, or internal auditing departments and in the authority of these departments not only to advise but to supervise many previously decentralized prerogatives of lower management.

SUSCEPTIBILITY OF ENTERPRISE FUNCTIONS TO CENTRALIZATION

As will be recalled, the principal functions of any business enterprise are the creation of utilities (production), the exchange of utilities (sales), and the financing of this exchange and the enterprise itself (finance). In addition, through the need for specialization, there have been split off such functions as personnel, accounting, statistics, purchasing, and traffic.

A study by the American Management Association has thrown some interesting light on the extent of decentralization in these enterprise functions.[5] While the study was limited to relatively few companies, its findings may be regarded as typical and agree with other findings, the observations of the authors, and the normal expectancy in business operations. These findings are the basis of the conclusions in the paragraphs following.

Production. Authority over production activities is usually the first to be delegated by the chief executive of a company, although the extent of this delegation varies with such factors as the nature of the product, the scale of production, markets, and supply of labor and materials. As the production scale increases or as the processes become more complex, authority is likely to be decentralized. However, even in large companies where authority over manufacturing activities is widely dispersed, a centralizing influence is obtained through budgets and controls over operating results, as well as through the functional-staff departments made necessary by various internal and external factors discussed above.

Sales. Authority over sales, as with production, is also likely to be decentralized early in the history of an enterprise. As soon as the geographical area covered by salesmen becomes extensive, or salesmen numerous, the sales department begins to feel strongly the advantage of decentralization. As a matter of fact, delegation of decision making in the field of selling is usually greater than in any other enterprise function. Even where there may be considerable centralization of authority over other functions, decentralization in the case of sales is probable.

The reason for this fact is not hard to find. Since customers are geographically scattered and require much individual attention by the salesman, sales performance is not often centralized. Customer convenience requires that sales effort be brought to the customer and that the branch or district sales manager and his staff have a wide area of discretion in handling him. This decentralizing influence is usually accentuated when a manufacturer has several product lines. Despite strong centralization policies, the Ford Motor Company, when it introduced the Lincoln and Mercury lines, was forced to establish new sales divisions for these cars, with authority delegated to them to direct sales effort somewhat differently from that used for the Ford.

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[5] *Ibid.*, Appendix C, pp. 188–195.

While the function of selling is usually subject to a relatively great degree of decentralization, many of the activities that are staff or service to sales are not so likely to be decentralized. For example, advertising and market research tend to be managed under centralized authority, mainly because of the need for specialized talent, the economies of centralizing, and the requirements of uniform policy.

Finance. The finance department of a business is ordinarily the last, and in large business frequently the only, stronghold of centralization of authority. Even where a company has widely adopted a policy of decentralization, the finance function is far less decentralized than any other. Centralization here is usually credited with "holding the business together," since in the position of the treasurer or vice-president for finance one final check is retained on the autonomy of the sales and production divisions.

The reason for this centralization is simple. The enterprise objective of almost every company is profit and stable existence. Without control over funds, neither can be attained in the absence of inordinate luck. Moreover, the performance of a manager, as well as that of a whole business enterprise, is normally gauged, in a free enterprise system, on financial considerations.

The centralizing influence is customarily exerted through budgetary controls over both expenses and capital expenditures, although the controls over the latter are likely to be more strict than those over the former. In a large company, for example, the manager of a manufacturing division may be given authority to approve expenditures for operating expenses to a fully budgeted amount running to hundreds of thousands of dollars each week and may be permitted to approve a single expense item of $50,000; yet he might be limited to the authority to approve only $1,000 of capital expenditure. The authors know of a case of a sales manager who could sign sales contracts to $5,000,000 but could not approve a capital expenditure of more than $100. The reason for this distinction is usually that sales and operating expenses can be more easily budgeted and that more effective corporate controls can be placed over them (such as price setting, establishment of delivery schedules, control over hirings, and uniform contract terms). Capital expenditures, on the other hand, are difficult to budget accurately and to coordinate properly, and, more than any other factor, they represent a commitment of scarce capital resources. At the same time, there is a growing awareness that closer centralization of authority over both sales and operating-expense commitments should be made, since overextension of operations can soak up a corporation's capital lifeblood as readily as uncontrolled capital expenditures.

Personnel. As might be expected, certain areas of personnel activities are subject to a high degree of centralization. Among these are areas linked to the collective-bargaining contract, the centralization of which has been forced on companies as the result of such contracts and government regulations. Other sensitive areas are wage and salary administration, job evaluation, and administration of managerial selection and appraisal procedures. Except for these specific areas, which have unquestionably been expanding and growing in importance, the personnel function should be as decentralized as managership. Human relations are the grist of management, and effective management must have the widest kind of authority over them, a fact too often overlooked by the zealous personnel specialist.

Accounting and statistics. With the eyes of top managers fixed on the necessities for over-all controls, the predominant trend of recent decades has been to centralize authority over accounting and statistics, except, of course, in the actual gathering of data. The need for control data at the top and the economies of concentrating accounting and statistical work have been influences in this development.

Recently, however, alert managements have tended to decentralize a large portion of this activity. Central control and concentration of accounting and statistical data may be most economical and may serve top managers well, but there have been numerous instances where the managerial group on the firing line—the group that can really control costs, production, and sales—have been denied the information they need to control their jobs or have received information too late to be of any value. As a consequence, industry has developed a kind of centralized decentralization, with centralization of authority over the accounting and statistical activities necessary for the upper levels of management but with decentralization of those needed for the lower levels. Some companies have consciously assumed the costs of some duplication of effort in order that managers at lower levels may have the necessary information.

Purchasing. It is difficult to make any generalizations with respect to decentralization of authority over purchasing. The purchase of capital equipment and the acquisition of major materials that comprise a large share of costs are almost invariably handled centrally. Almost all other purchases are likewise treated in single-plant companies. Where a company has several plants in a fairly small geographical area or where the purchasing problems are rather simple, concentration of authority over purchasing normally results. Where the company, however, has many plants or branches geographically dispersed or where it has departmentized along product lines, purchasing decisions, particularly over the less important items, are likely to be within the province of the decentralized departments but subject to the functional authority of the central purchasing department.

Traffic. The American Management Association study[6] disclosed that traffic functions are likely to be subject to centralized authority in cases where, as in vertically integrated plants, a steady flow of work depends upon a unified and efficient system of routing materials among the various plants and suppliers. The study further showed that in most companies such traffic functions as studies of transportation rates, negotiation with carriers, and the establishment of basic shipping policies are subject to centralized authority. In companies in which the cost of transportation constitutes a major element in the total production cost, the traffic functions are usually centralized. On the other hand, in those enterprises whose transportation costs are a small portion of total costs, the traffic function may be widely dispersed, although, even in these cases, the need for specialized handling leads often to centralization of authority over the function.

A Case in Decentralization: The General Motors Corporation[7]

One of the most successful examples of management and one with a well-publicized philosophy of decentralization is the General Motors Corporation.[8] It is interesting as an illustration of centralization principles, not because it is a typical American business enterprise—its size and phenomenal development are hardly typical—but because its organizational philosophy and practices have been thoroughly tested by the rugged standards of more than three decades of competitive and dynamic enterprise.

GM's philosophy of decentralization. Referred to by Peter Drucker as an "essay in federalism,"[9] General Motors' policy of decentralization aims to provide for decentralized operations and authority, with coordinated control over the semiautonomous divisions established in the top management of the corporation. This policy means, according to the company, that "subject to broad corporation policy the operating divisions into which our business is organized are left pretty much on their own" and that "each division makes its own decisions within the framework of over-all corporation policy." [10] This philosophy has been characterized by Donaldson Brown as a case of "centralized control with decentralized responsibilities." [11]

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[6] *Ibid.*

[7] Material for this section has been freely drawn from *GM and Its People* (a description of the company organization written originally for employees); P. F. Drucker, *Concept of the Corporation* (New York: The John Day Company, Inc., 1946); Dale, *op. cit.*, pp. 98–106; and D. Brown, *Centralized Control with Decentralized Responsibilities*, Annual Convention Series, No. 57 (New York: American Management Association, 1927).

[8] The organization chart of the General Motors Corporation is shown in Figure 11.

[9] Drucker, *op. cit.*, p. 46.

The aims of decentralization. In his study of General Motors, Drucker interviewed a number of the company's executives and summarized their views as to the aims of decentralization. He found that the following advantages were claimed for it: [12]

1. Speed and lack of confusion in decision-making
2. Absence of conflict between the top management and the divisions
3. A sense of fairness in dealing with executives, confidence that a job well done would be appreciated, and a lack of politics in the organization
4. Informality and democracy in management
5. Absence of a gap between the few top managers and the many subordinate managers in the organization
6. The availability of a large reservoir of promotable managerial manpower
7. Ready visibility of weak managements through results of semi-independent and often competitive divisions
8. An absence of "edict management" and the presence of thorough information and consideration of central management decisions

The officials of General Motors see in its policy of decentralization advantages for both the large corporation and the independent small business. The division manager may operate his division much as an independent businessman, but, unlike the manager of the small business, he has available to him the large financial resources and the staff facilities and know-how of the large enterprise. Perhaps the philosophy of decentralization and its aims are even more dramatically expressed by the definition of an executive at General Motors, as reported by Drucker, as "a man who would be expected to protest officially against a policy decision to which he objects."

How decentralization works. How the philosophy of decentralization of General Motors works in practice is perhaps best illustrated by the operations of the various divisional managements. These divisions, such as Chevrolet, Buick, Allison, or Frigidaire, operate much as independent businesses, always subject, of course, to over-all corporate policy, the formulation of which will be described presently. Subject to this policy and the control implied by it, however, each division designs, develops, manufactures, and merchandises its own products. It makes its own purchases of parts and materials from other divisions of the company or from the outside, with freedom to purchase wherever it can find the most suitable product at the best price. Each division hires and trains its own employees, develops and maintains its own staff and line organizations, and decides upon its own manufacturing processes and methods. In fact, Drucker found that the managers of several divisions estimated that 95 per cent of all decisions affecting their operations fell under the manager's area of authority.[13]

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[10] *GM and Its People*, p. 8.

[11] Brown, *op. cit.*, p. 1.

[12] Drucker, *op. cit.*, pp. 47–48.

In principle the philosophy of decentralization extends also into the divisions, and authority is pushed down as far as it will go. But the very fact that the divisional managers have been given so much independence means that authority is not always as decentralized in one division as in another. Central management does not dictate organizational practices of the divisions, a fact that has occasionally resulted in more centralization of authority below the divisional level than for the corporation as a whole. However, the philosophy of decentralization tends to permeate the organization, largely because of the strong leadership exercised by Alfred Sloan, and division managers promoted to a high position in such an atmosphere are likely to reflect this philosophy in their actions. At the same time, the divisions may vary in size from a thousand employees to more than forty thousand, and one could not expect the degree of decentralization to be the same for all divisions. Moreover, certain divisions have their performance considerably decentralized, while in others performance is highly centralized; and the effect of this difference, as well as the effect of differences in other factors bearing upon decentralization of authority, would naturally affect the dispersal of decision making.

The diffusion of decentralization throughout the organization is also encouraged by the training of executives who are promoted to the posts of division managers and higher. Drucker found that many of these had come from plants and divisions where authority had been fairly well decentralized and that there was a feeling in the company that persons with well-rounded experience in managerial matters at lower levels were most likely to be promoted to the top.

Centralization of top-policy formulation. One may get an erroneous impression of the degree of independence of the division managers, since the 5 per cent of decisions reserved for top management may be extraordinarily important. General Motors does have interesting machinery for the establishment of central policy. It will be noted from Figure 11 that, at the top of the company organization, there is an operations policy committee, which reports to the board of directors and to which an administration committee reports. On the financial side there is also a financial policy committee reporting likewise to the board of directors. In addition, reporting to the board are an audit committee and a bonus and salary committee. And working with and reporting to the administration committee are ten policy groups, somewhat in the nature of subcommittees, which do much of the preparatory policy-determination work in a number of specialized fields. This committee organization, with the board of directors as the top committee of all, plus, of course, the top management group, the general, financial, and legal staffs, and the division managers, represents the top policy-making machinery of the company.

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[13] *Ibid.*, p. 56.

Thus, it can be seen that major policy matters are sharply centralized in the top level of the organization, although ample channels for communication to the divisions are established. In general, the line executives dominate the policy-formulation machinery, with the staff departments having an active role only in the advisory and study levels of the policy groups attached as subcommittees to the administration committee. It can also be seen that control over financial policy is even more centralized than operation policy, with major financial matters being practically reserved to the board of directors itself and with a direct line of authority from the board to the financial and legal staffs.

Centralized control. Although General Motors practices and preaches the philosophy of decentralization, it realizes that no division of a company and no department of any division can be given *complete* freedom and autonomy. To practice complete decentralization would be to permit a division to bankrupt a company or to allow a department to succeed even at the cost of failure of the entire enterprise. Yet it is an interesting commentary on the lack of managerial understanding of many regional and divisional managers in all types of enterprise to note how often they chafe under the necessary controls of central management and mistake a policy of decentralization for an untenable policy of departmental independence. The facts of business life are simple. No subdivision of a business can be given so much authority that the central management of the entire enterprise lacks authority to accomplish its objectives.

Combining decentralized authority with the degree of centralized authority necessary to accomplish control is one of the major reasons for the success of General Motors. Perhaps the most important of these centralized controls relates to finance. Auditing controls are placed at the very highest level, in a position independent of the management at other levels. Accounting controls, including the methods of accounting to be followed in the divisions, the cost comparisons made, and the measurement and comparison of rate of return in each division, are functional matters under the jurisdiction of the executive vice-president in charge of financial and legal staffs. Each division comptroller, for example, not only reports to his line superior, the division manager, but also has a clear functional responsibility to report to the comptroller of the corporation, to whom he sends income statements, balance sheets, cost comparisons, and other financial data, prepared in accordance with instructions of the central office.

Centralization of financial controls is also closely geared to centralization of top-management programming. The top managers of the corporation, in consultation, of course, with the division, establish major planning goals, production and sales policies, and performance standards that fit into centrally determined long-range plans. These major goals and plans are converted into capital and operating budgets, so that, even though the division managers enjoy considerable freedom of decision, the top management has not lost control over the finances of the enterprise.

In addition, certain definite authority limitations are imposed on the division managers. These include such matters as capital expenditures, product line and price, union contracts, salary changes above a certain level, and bonuses. These matters, regarded as basic to the successful operation of the company as a whole, are centralized in the top managerial group.

One cannot overlook also the centralizing effects of the headquarters staff departments. Although these staff activities may be largely advisory in nature, the policy-determination machinery of the company, as has previously been noted, operates so as to ensure consideration of their recommendations by the division managers. Through the committee framework and the various personal contacts of the central staff departments with the line managers and their staffs, planning recommendations, techniques and practices, and new policies suggested by the central staff are likely to have company-wide application. In some cases, such as those of personnel and finance, the functional authority of the staffs forces the divisions to listen. In either case, the staff operations have a controlling effect on the company's many divisions.

Recentralizing trends. As in other businesses, a study of General Motors discloses some interesting trends toward recentralization of authority. The expansion of functional authority in personnel, public relations, tax policy, and purchasing is ample evidence of the centralizing requirements of national unionism, increased government control, and the fettering effects of corporate taxation. One finds increasingly that, regardless of the philosophy of decentralization of the company, it has no choice but to draw back from the division managers and their subordinates much of the authority that would normally be delegated to them.

The keys to success of GM's decentralization. It cannot be denied that General Motors has been one of the most successful industrial enterprises and that much of this success is due to the quality of management it has enjoyed for more than three decades. To present such a record of financial success, alert and progressive management, and increasing dominance in so dynamic and competitive an industry, it must, despite its size, have found a successful organizational formula. This formula is believed to be a kind of centralized decentralization. The organization is decentralized to an enormous extent; yet major planning and control are centralized to yield continuity, coordination, and desired uniformity.

The keys to this success are not hard to find. In the first place, the leadership of the company has encouraged decentralization, has set the tempo for a combination of independence and coordination, and has furnished the machinery for centralization of top policy and control, with decentralization of all but major matters. Moreover, the policy of the company to give executives authority and then hold them to high standards of performance has a way of teaching people to manage, and manage well. This policy, taken in conjunction with that of careful selection and broad training of executives, tends to bring men of courage and ability to the top.

Another major key to the success of decentralization is the conscious policy of General Motors to make upper-level managers independent. One of the debilitating influences in large businesses is the tendency for yes men to develop in the middle and upper levels of management. It is only natural that a person reaching the top of an organization should develop a certain feeling of infallibility as to the wisdom of his decisions and the course he followed to reach his position. Indeed, many top executives forget that they reached their position by soliciting criticism and seeking out the truth. In order to make sure that subordinates who have been delegated decision-making power will utilize that authority independently, carefully, and courageously and will make decisions with a view to their wisdom rather than precedent, a feeling of independence must be developed. Much of this can be accomplished by sheer force of leadership. But perhaps a more effective way is to make sure that a manager does not have to consider his job security before making each decision. It has, therefore, been a policy of General Motors to be generous with the managerial group and through stock and cash bonuses do what it can to ensure that by the time a person reaches the status of division manager, and usually well before, he will be financially independent. Likewise, men who do not fear each other often cooperate the best. And when, as in General Motors, these men have a stake in the success of the enterprise, their cooperation is likely to be in the direction of furthering the corporation's objectives.

Perhaps another key to the success of the company's practice of decentralization is the competition between divisions. One of the problems of large businesses is that department heads tend to be in a protected monopoly position *within the company*. The manager of factory A, which produces parts, has a monopoly position with respect to the manager of factory B, who *must* use these parts, regardless of cost or quality, to manufacture his assemblies. It is exactly here, in breaking down the monopoly position of one division with respect to another and in making the divisions meet the competition of outside firms, that General Motors forces on the division manager a high standard of performance. Furthermore, the market test is extended to the completed product, so that the manager of an automobile division, for example, is measured by central management not only on the basis of his costs and profits but on the basis of how well he has done against outside competition.

Another major factor in the success of decentralization is the effective way in which General Motors has centralized control and major planning. Without such effective policy formulation and follow-up and without the highly centralized control over money, the company would degenerate into a number of too-independent island empires. The resultant disintegration of coordination would, of course, be at the cost of some of the most important advantages of the large firm, such as the specialized services of engineering, marketing, public relations, and financial experts. Lack of control would also soon result in dissipation of the financial resources necessary for expansion, development, and market aggressiveness.

Obtaining the Degree of Centralization in Practice

Underlying the discussion to this point has been the implied assumption that managers can obtain the degree of centralization upon which they have decided. In other words, the emphasis has been upon how much centralization, rather than whether the degree of centralization or decentralization decided upon could be actually realized and maintained.

Many managers who believe that authority should be pushed down in an organization as far as it will go are faced with the practical problem of how to push it down there. It is a rare top manager who does not find in his organization somewhere an authority-hoarder who simply will not delegate. One of the authors had occasion once to observe a division controller whose office was piled high with major policy matters requiring his attention, while he engaged in minute examination of employees' expense accounts, giving as his excuse the statement that none of his work could be entrusted to his subordinates.

While no manual can be written to indicate how to ensure that authority is properly decentralized or appropriately withheld, there are several approaches that can be used with some chance of success. One of these is merely a technique of organization, the provision of a clear written statement of each manager's duties, the degree of authority delegated to him, and his responsibility. Besides being clear and preferably written, the statement should be published in such a way that all employees may know what it contains. Such a statement can serve a vital purpose in settling jurisdictional squabbles and excursions beyond the authority area of an individual manager.

Another important technique lies in the example and teaching of the superior, starting at the top of the organization. As has been pointed out, the character of the leadership in an enterprise has a permeating effect, and the philosophy of authority dispersal or concentration is no exception. There are in every firm of any size those who will reach out for power, impinge upon the activities assigned to others, and bully the nonbelligerent. Rules and job descriptions are often subject to differences in interpretation, which can be conveniently stretched or circumscribed, depending upon the political environment. Their unreliability, despite their obvious usefulness, stands as a warning to executives that the most dependable foundation for achieving the desired degree of centralization is the education of subordinate managers in the rights of others—teaching them restraint as well as aggressiveness.

One of the most effective means of forcing delegation of authority, particularly in middle and lower levels of organization, is to require managers to have a large number of subordinates, and, at the same time, hold them to a high standard of performance. In the Sears, Roebuck and Company studies[14] it has been found that, where a manager's span of control was well stretched, he had no alternative but to delegate authority. At the same time, in order to protect his own performance, the manager with so many subordinates found it essential to obtain good subordinate managers, train them well, establish clear-cut policies, and find efficient means of control. Thus, Sears has discovered that widening the span of management reduced levels of supervision, shortened communications, resulted in decentralization of authority, required better management, and forced managerial training.

Another technique used to force decentralization has been the policy of refusing to promote managers until they have subordinates trained to take their places. In order to accomplish this training and assure themselves that the subordinates could take over, managers usually have no alternative but to delegate authority. Moreover, this policy tends to remove one of the major causes for hoarding authority, the desire on the part of an individual to gain a certain degree of job indispensability by making sure that his duties cannot be handled by any of his subordinates.

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[14] J. C. Worthy, "Organizational Structure and Employee Morale," *American Sociological Review,* vol. 15, pp. 169–179 (April, 1950). Information was also obtained directly from Mr. Worthy.

Occasionally the problem presented is how to retain a predetermined degree of authority. Division and branch managers—because they are far away from the home office, wish to build empires, or want to do a complete job—are likely to assume too much authority. The division manager who resents the outside auditor, who sabotages centralized controls, and who fights attempts of central management to limit his expenditures is a case at point. The answer, of course, to this problem is primarily one of leadership, clear policy determination and authority delegation, and proper training of subordinate managers. But perhaps the principal answer lies in the character of the top executives. If they temporize, do not support the authority delegations they have made, ignore the organization structure, condone serious deviations from policy, and neglect in other ways to do an effective managerial job, little can be done to obtain any certain degree of centralization—or decentralization—in practice.

Centralization and Decentralization: Conclusions

In dealing with the changing nature of professional management in the United States, one prominent member of the top management of a large business enterprise places decentralization of authority as the number one objective of his company and of scores of other companies in the nation.[15] He sees in decentralization of the decision-making process the answer to the problems of size and the means for recognizing the personnel problem in industry.

Throughout business management, decentralization of authority has grown in recent years until it at times approaches the characteristics of a fad, with the management that does not subscribe to dispersal of decision making often in danger of appearing outmoded. To a great extent this development is understandable. If the principal key to enterprise efficiency lies in the coordination of people, it is logical that those who are responsible for this coordination should have the requisite authority to manage and that this authority in turn be pushed down into the organization as far as management positions exist.

Furthermore, the present focus on management and the development of managerial manpower emphasize the importance of manager training. As is well recognized, one must manage in order to learn to manage, and it is least risky to begin this training at the lowest levels in the organization structure.

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[15] R. W. Johnson, "The Changing Aspect for Professional Management," *Michigan Business Review,* vol. 4, no. 1, pp. 16–24 (July, 1952). Mr. Johnson is executive vice-president of the General Electric Company.

Additionally, the very size of business forces decentralization of authority. As top managers become increasingly aware that the functions of managing extend through the organization to the foreman level, the necessity for decentralizing the authority to manage becomes increasingly apparent.

At the same time, extensive decentralization of authority is not a shibboleth, to be blindly applied. In the first place, in many organizations, the size and complexity of operations do not require it, and the losses in policy uniformity and other costs of decentralization may not make it worthwhile. In the second place, decentralization is not without costs, even in the larger companies. For, in addition to the dangers from nonuniform policy and the problems of control, there are often real financial costs of decentralization. As authority is decentralized, the manager becomes more and more an independent operator of a small business. He may acquire his own accounting force, his own statisticians, his own engineering staff. Indeed, he may soon be duplicating the specialized services of the top company organization, with resultant increase in cost and loss of the quality of staff- and service-department activities that the larger enterprise can maintain.

Perhaps the principal problem of decentralization is the loss of control. No enterprise can decentralize to the extent that its financial existence is threatened and the achievement of its enterprise goals frustrated. A philosophy of decentralization must be tempered by selective centralization of certain areas of vital major policy.

The chief forces opposing decentralization of authority are not the managers of American business or their understanding and utilization of management principles. They are rather forces largely external to business. Political centralization, with widespread controls of business concentrated in the national government, forces a high degree of recentralization of decision making in business. Likewise, the rise of national unionism, with so much concentration of authority in the officers of these unions, forces recentralization of business authority. And business managers themselves, through their delegation of authority to numerous trade associations and their willingness to abide by many industry policies so made, are—probably necessarily, although perhaps unwittingly—participating in the process of limiting decentralization of authority in American industry.

Selected References

Brown, D., *Centralized Control with Decentralized Responsibilities,* Annual Convention Series, No. 57. New York: American Management Association, 1927.

Dale, E., *Planning and Developing the Company Organization Structure,* Research Report 20, Part I, pp. 98–119. New York: American Management Association, 1952.

Davis, R. C., *The Fundamentals of Top Management*, Chap. 9. New York: Harper & Brothers, 1951.

Drucker, P. F., *Concept of the Corporation*, Part II. New York: The John Day Company, Inc., 1946.

GM and Its People. Detroit: General Motors Corporation, 1949.

Newman, W. H., *Administrative Action*, Chap. 12. New York: Prentice-Hall, Inc., 1951.

Petersen, E., and E. G. Plowman, *Business Organization and Management*, Chap. 11. Homewood, Ill.: Richard D. Irwin, Inc., 1948.

Problems and Policies of Decentralized Management, General Management Series, No. 154. New York: American Management Association, 1952.

Self, H., *Problems of Decentralization in a Large Scale Undertaking*. London: British Institute of Management, 1951.

Worthy, J. C., "Organization Structure and Employee Morale," *American Sociological Review*, vol. 15, pp. 169–179 (April, 1950).

12

COMMITTEES

One of the most controversial and ubiquitous devices of organization is the committee. Whether referred to as a committee, board, commission, task group, or court, its essential nature is the same. For the committee is merely a group of persons to whom, as a group, some matter is committed. It is this characteristic of group action that sets the committee apart from other managerial devices. And it is the fact that the committee is a body of persons appointed to deal with a problem that has sometimes led it to be regarded as the plural executive, a managerial position filled with two or more persons instead of the more customary individual.

However, as can readily be ascertained upon reflection, some committees undertake managerial functions, and others do not. Some make decisions, and others merely deliberate on problems without any authority for decisions. Some may have authority to make recommendations to a manager, who may or may not accept them, while others may be formed for no other purpose than to receive information, with no task of deliberation and none of decision.

NATURE OF COMMITTEES

Because of the variation in authority assigned to committees, much confusion has resulted as to their nature. One management scholar finds committees to be a "distinct type of staff organization" having no "line" characteristics.[1] Another scholar refers to a committee as a "group of people specifically designated to perform some administrative act" [2] and by implication indicates that a committee is, at least on occasion, an executive or plural manager. The fact is that a committee may be either, depending upon the authority it carries. If the authority involves decision making that affects subordinates responsible to the committee, the group is a plural executive, and the committee is managerial in nature. If the authority relationship of the committee to its superior is advisory, then the group is in staff position. Or the committee may be neither and may be used as a pure information-receiving device. The writers have, for example, heard top business executives object to being appointed to "advisory" committees of educational, civic, and trade organizations when their function is actually to receive already-developed plans incorporating decisions previously made.

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[1] R. C. Davis, *The Fundamentals of Top Management* (New York: Harper & Brothers, 1951). On pp. 468–469, Davis states that the committee "is a common type of organizational element—so much so that some students of business regard it as one of the basic business forms. There are, however, only two basic structural forms: Line and staff. The committee is a distinct type of staff organization."

[2] W. H. Newman, *Administrative Action* (New York: Prentice-Hall, Inc., 1951), p. 217.

Committees may also be formal or informal. They may be established as a part of formal organization structure, with specifically delegated duties and authority. Most committees with any permanence or standing in organization fall into this class. Or they may be informal, that is, organized without any special standing and ordinarily without any specific delegation of authority and usually established by some person who desires group thinking or group decision making on a particular problem. Thus, the manager of one department may find that he has a problem that calls for advice from other managers or specialists outside his department, and he may call a special meeting for the purpose. Indeed, this kind of motivation, plus the occasional need for gathering together in one room all the authority necessary to deal with an unusual problem, gives rise to many of the numerous conferences in organizational life.[3]

Moreover, committees may be relatively permanent, or they may be temporary. Normally, one would expect the formal committees to be more permanent than the informal, although this is not necessarily so. A formal committee might be established, with appropriate provision in the organization structure, by the order of a company president for the sole purpose of studying the advisability of building a new factory and be disbanded immediately upon completion of its task. And an informal committee set up by the factory manager to advise him upon the improvement of quality or to help coordinate delivery dates with sales commitments might continue indefinitely.

At the same time, not all personal contacts in organization may be properly referred to as committee action. The executive who calls his assistant into his office or who confers with one or more of his department heads is not necessarily creating a committee. Nor would one regard an audience at a lecture, even when the speaker is occasionally questioned, as a committee. While it may sometimes be difficult to draw a sharp line of distinction between committees and other cases of group meetings or personal contacts, the essential characteristic of the committee is group action in dealing with a specific problem area.

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[3] It will be noted that the use of "formal" and "informal" here is not in the same sense that Chester Barnard employs the terms in discussing (in his *Functions of the Executive*, Chaps. 6–9), formal and informal organizations. It will be recalled that Barnard refers to any organization as formal when the activities or forces of two or more persons are *consciously* coordinated toward a given objective. The essence is joint purpose. Informal organizations, on the other hand, are "the aggregate of personal contacts and interactions and the associated groupings of people" without any "specific conscious joint purpose" (pp. 114–115). As used above, a formal committee is one formally provided for by the organization of an enterprise, while an informal committee is one for which no such provision is made; both, however, are cases of conscious coordination toward a joint purpose.

The Widespread Use of Committees

The committee is a device in wide use in all types of organizations. In government, one finds a large number of standing and special committees of every legislative body; indeed, the state and national legislatures are committees, as are the cabinets of the chief executives of the Federal and state governments. Groups actually manage many government agencies, as can be noted from the Tennessee Valley Authority, the Atomic Energy Commission, the Federal Deposit Insurance Corporation, and the Export-Import Bank. Even the courts make liberal use of the device.

In educational enterprises, the committee form reaches its ultimate when faculties of great universities, jealous of academic freedom and distrustful of the power of the manager, traditionally circumscribe the power of presidents and deans with a myriad of committees. Thus in one large university, there are more than three hundred standing committees to share in its administration or advise on policy. Such committees range from the importance of the academic senate and the budget committees to committees on committees, coordinating committees, and committees on alumni records, university welfare, and maintenance of order in examinations.

Religious institutions likewise lean heavily on the committee device, partly to encourage active participation in church affairs by members and partly to delimit the area of authority of religious leaders. While the actual authority of these committees may differ widely, depending upon the authoritarian traditions of the sect, the ever-present committees, ranging from the church board to the committee in charge of a church supper, are ample evidence of use of this device.

Committees are also prevalent in business. The board of directors is a committee, as are its various constituent groups such as the executive committee, the finance committee, audit committee, and bonus committee. Occasionally, one finds a business managed by a management committee instead of a president. And almost invariably under the president will be various planning committees, wage and salary review committees, grievance committees, task forces for particular projects, and numerous other standing and special committees. Moreover, at each level of the organization structure, one or more committees are likely to be found.

Reasons for the Use of Committees

One does not have to look far for the reasons for the widespread use of committees in organization. While there is a tendency to regard the committee as having democratic origins and being especially characteristic of democratic society, the reasons for its existence go far beyond the mere desire for group participation. Even in authoritarian organizations, committees are found, as in the organization of the Russian state and in that of National Socialist Germany and fascist Italy before 1945.

Group deliberation and judgment. Perhaps the most important single reason for the use of committees in organization, particularly in business enterprises, is the advantage of gaining group deliberation and judgment. CORNY This is a variation of the adage that "two heads are better than one."[4] Naturally, a group of people can bring to bear on a problem a wider range of experience than a single person can have, a greater variety of opinion, a more thorough probing of the facets of a complicated problem, and a more diverse training in the specialized aspects of the problem. Few indeed are the more important business problems that fall entirely into the realms of production, engineering, finance, or sales. Most problems, on the contrary, require more knowledge, experience, and judgment than any individual can be expected to possess.

It should not be inferred that group judgment can be obtained only through the use of committees. The staff specialist who confers individually with many persons expert in a given phase of a problem can obtain group judgment without the formation of a committee, as can the busy executive who asks his key subordinates or other specialists for memoranda analyzing a problem and making recommendations thereon. Often this group judgment can thus be obtained more efficiently, in terms of the time of members and of the executive, without the long deliberations a committee requires. The keen manager can usually grasp ideas and the reasoning behind them in a much shorter time in a concisely constructed, written memorandum than would be required for their oral presentation.

However, one of the advantages of group deliberation and judgment that cannot be obtained without the actual meeting of the group is the stimulation possible in oral interchange of ideas and in cross-examination techniques of the committee meeting. Leading as it does to the clarification of problem areas and to the development of new ideas, this interchange has seemed to be especially important in various managerial areas. Since the job of management is to accomplish objectives through people, it has often been found that the very subjection of policy matters to groups leads to better understanding.[5] There are also several studies indicating that the results obtained by group judgment have been found to be superior to those of individual judgment.[6]

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[4] "Even though," as the Scottish add, "one is a sheep's head."

Fear of delegation of too much authority. The development and widespread use of the committee, or plural-executive form, in organization can also be traced to the fear of delegating too much authority to a single person. This fear, especially pronounced in government, not only dictated to the framers of the American Constitution the establishment of a two-house legislature and multimember Supreme Court, but also dictated that the powers of government should be effectively divided among the Congress, the Supreme Court, and the President. Interestingly enough, despite this fear of centralized authority, the founders of the American Republic placed the administration of laws in the hands of a single top manager, recognizing the greater effectiveness of the single executive for this kind of task.

Fear of delegating too much authority to the individual has been felt in all levels and activities of government, as is evidenced by the numerous boards, commissions, and other instances of the plural executive. It may also be found in profusion in educational organizations, with their emphasis upon freedom of the individual, and in charitable and religious enterprises. In the latter type of organization, however, the willingness of people to be bound by the authoritarianism of faith and its interpretation by an individual has led to such concentration of authority as is found in the head of the Roman Catholic Church. However, in the various Protestant denominations, one finds far less willingness to trust the single executive, and the bishops or other church heads are usually well circumscribed by the authority of the committees that dictate denominational policy.

Such a fear has had less influence in business enterprises than in other types of organization. Business enterprises have, for one thing, developed primarily from small beginnings in the institution of private property, with its implications for complete authority of the owner; workers, too, have been free to avoid abuse of power by moving from one company to another; and the overriding importance of efficiency, finally, has favored the single manager. At the same time, the traditional existence of a board of directors as the top managing group of the business corporation may be traced, to some extent, to the fear of property owners to delegate too much authority to a single managing director.

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[5] The Ansul Chemical Company, which has experimented with group management (notably in the top executive team, consisting of the president, sales vice-president, production vice-president, and treasurer), found this to be one of the advantages of their use of a management committee at the top of the firm. See R. C. Hood, "Group Management—The Ansul Plan" in M. J. Dooher and V. Marquis (eds.), *The Development of Executive Talent* (New York: American Management Association, 1952), pp. 122–131.

[6] E. Dale, "Group Organization and Output," *Management News*, spring, 1949; Hood, *op. cit.;* and C. P. McCormick, *Multiple Management* (New York: Harper & Brothers, 1938).

This motive has likewise influenced the formation of many internal business committees. A committee may be established to make recommendations on a problem largely because the president or department head does not wish to take responsibility for making a decision and does not wish to trust the decision to an individual subordinate. Bonus committees are often established as the result of such motivation, and major financial and capital investment policies are entrusted to committees, partly because of unwillingness to trust a single individual with complete authority to make a decision on so important a matter. Then, too, committees may be established to come to some conclusion on much more minor matters because a manager may not wish to entrust the decision to any one of his subordinates.

Representation of interested groups. A significant motive for the establishment of committees is the desire to have represented in policy matters various interested groups. Motives of this kind, which played an important part in the organization of the United States House of Representatives and the Senate, continue in all branches and operations of government where either law or tradition requires that the two major political parties, various sections of the country, or various pressure groups be represented.

Representation plays a part even in the establishment and manning of committees in business. Boards of directors are often selected on the basis of groups interested in the company and, perhaps more often, on the basis of groups in which the company has an interest. Thus, a large national company may select as members of its board men prominent in various geographical sections and representing banks, insurance companies, newspapers, and large customers. When an executive has a particularly difficult internal problem involving managers and specialists in various departments and activities, he may well choose his committee to give these interested parties representation. He may ostensibly do this in order to get a more balanced group judgment and a more diversified point of view, but he may actually be doing it to ensure that these groups will be represented and will thereby feel that their interests have been considered.

Coordination. Committees are also a useful device for coordinating business planning and the execution of business policies. The dynamics of modern business places a heavy burden on its management to make sure that plans and actions are well integrated. With complications, change, and the necessity for assigning duties to numerous specialized departments, one of the most difficult problems is to make sure that every action, every subordinate plan, and every expenditure of funds is coordinated with others, not only in terms of time, but also in quantitative terms.

Where the development and execution of plans require coordination, the committee is a helpful device for this purpose. Individuals concerned are able to obtain firsthand a picture of the over-all plans and their place in them. They are able to contribute suggestions on the spot for improvement of plans. The committee furnishes a valuable place where agreement may be reached as to the steps for coordination. Furthermore, the committee, as a coordinating device, may be a valuable means for pooling authority to plan a program involving several departments.

Transmission of information. The committee is a valuable means for transmission of information. All parties interested in a given problem can learn of it simultaneously, and decisions and instructions can be received uniformly and with opportunities for clarification. The time thus saved may be considerable, and the spoken word, with its possibilities for overtones and emphasis and the opportunities for clarification, may well be superior to the most carefully written instruction.

Consolidation of authority. In normal business operations there are cases where a manager in a certain department, branch, or section has only a portion of the authority necessary to accomplish a program of action. These are known as instances of splintered authority. Good organization practice provides normally for the distribution of authority to managers, so that they will have the power appropriate to their position. However, this is not always possible in the case of every kind of business problem, and a matter might call for the exercise of authority that no individual manager at a certain level possesses, except, of course, the chief executive officer or other high executive.

One way to handle problems of this sort is to refer them upward in the organizational hierarchy until they reach a point at which the authority requisite for a decision exists. But, altogether too often, this place is in the office of the president, and the problem will not be of the kind or importance to be decided at that level. Suppose, for example, that a customer of a machine-tool manufacturer wished a slight, but unusual, change in design in a piece of equipment. He would normally approach the sales department, but if there were no established procedure for handling this change, the authority of the engineering department, the production department, and the cost estimating department would be required to empower it. In this case, one of the managers in the sales department might establish a special purpose committee to study the problem, to agree on the nature and price of the change, and to use their combined authority to approve and execute the change. By so doing, the president, to whom the matter would have to be referred if the problem were carried upward through organizational channels, would be spared the time and effort of dealing with the problem, or in working out special organizational machinery for something that might not come up again in precisely the same form.

It is this use of the committee device, even though the group so established is quite informal, that gives so much flexibility to organization. At the same time, cases of consolidating splintered authority through the committee method should be watched carefully to ascertain whether the organizational structure itself might not be changed to concentrate in one position the appropriate authority to accomplish recurring tasks. There is a danger that splintered authority will become so much the rule rather than the exception that the purpose of organization—to provide for coordination of people with the least cost in personnel and time—will be defeated. As will be noted below, the use of committees is an expensive process and must be weighed in this light.

Motivation through participation. The establishment of committees provides an opportunity to achieve wider participation in the decision-making process. Among the ruling forces of human motivation are status and feelings of belonging, accomplishing, and participating. Persons who have had a part in the planning of a program or the making of a decision are certain to feel more enthusiastic in accepting and executing it. Even though an individual may have contributed little to the plan or the decision, the very fact of participation makes him feel that it is his.

An intelligent and effective leader will, therefore, at times appoint a committee to come up with a recommendation or a decision on a matter where group deliberation or judgment is not necessary, a matter he has already decided, or one where no decision but one can be reached. By skillful leadership or by the sheer force of facts, the group can be brought to a foregone decision. If the leader can avoid the appearance of "railroading," he is certain to obtain from the group consideration a far stronger motivation toward acceptance and successful prosecution of a plan than if he announced it to his subordinates without their prior study. Since the decision, also, comes from the group rather than any individual, even those persons who tend to disagree with it may feel compelled to loyalty by the sheer weight of group opinion.

Why you can't trust Executives
~~Leaders~~
by Brown

Appointing committees to avoid action. It cannot be denied that committees are sometimes appointed by a manager when he does not want any action to ensue. As will be noted presently, the committee device has many drawbacks, among them its costliness in time and the difficulty of getting a group to agree. One of the surest ways to delay the handling of a problem and even to postpone a decision indefinitely is to appoint a committee to study the matter. In organizations of all kinds, skillful chairmen or managers resort to this device when they wish to avoid action.

Dangers in the Use of Committees

The use of committees in organization is accompanied by certain dangers. Indeed, the disadvantages of committees have been so widely experienced that many managers make little use of them. Many disparaging definitions of committees are current in business enterprises, such as that referring to a committee as "made up of the unfit selected by the unwilling to do the unnecessary."

Cost in time and money. The cost of committee action in time and money is likely to be considerable. A committee may require members to travel some distance to reach a meeting. During the meeting, each member normally has the right to be heard, to have his point of view discussed, to challenge and cross-examine the points of view of others, and to consider at length common grounds for a considered group conclusion. Seldom are individuals as concise and exact in the spoken word as they are in writing, and the "thinking out loud" that takes place is likely to be a waste of time for those who must listen. If the committee must reach a unanimous or nearly unanimous decision, the process of discussion and examination is likely to be lengthy. Moreover, if a decision can be reached quickly, or indeed if a unanimous decision can be reached at all, the committee discussion may have been unnecessary in the first place.

The monetary cost of committee discussion can be very high. One must consider not only the cost of executive time (which for a $25,000-per-year executive may run to $15 an hour) but also the cost to the company of the time lost by the executive from his principal managerial job.

This cost in time and money becomes all the more significant when a committee is assigned a problem that could as well, or better, be solved by a single individual, or by an individual with the help of a smaller and lesser-paid staff. Thus, the advantages of committee action must be considerable to offet the costs.

Compromise at the least common denominator. Where committees are required to come to some conclusion or to reach some decision, there is a danger that the committee action will be weak, watered down, or even meaningless. If a matter referred to a committee is so simple or clear of solution that differences of opinion do not exist, the utilization of committee time is wasteful. If differences of opinion exist, the points at which all or a majority of the members of a committee can agree will be the least common denominator of the group. This is almost sure not to be as strong and positive a course of action as that which would be undertaken by an individual who has only to consider the various aspects of a problem and then reach a conclusion. Because of the necessity for seeking out common ground, it is not surprising that so many committee actions are innocuous or go little beyond an agreement to defer action.

The danger of compromise at the level of the least common denominator grows as the percentage of agreement felt necessary for committee action increases. Even committees whose authority delegation requires only majority agreement sometimes develop traditions of unanimity. Small groups of people frequently seek—from feelings of politeness, mutual respect, and humility—to reach conclusions on which all can agree. Since committee members are ordinarily picked from organization equals, the reluctance to force a conclusion on a recalcitrant minority is understandable. The group thereby increases, however, the possibility of weak decisions.

This danger is largely eliminated when the committee is used as a forum for discussion and deliberation or as a tool for transmitting information and when the decision is made by the chairman of the committee. It is also reduced when a skillful chairman leads the committee along a preconceived path. But when a committee is operated in either of these ways, it ceases to be a true case of group decision making.

Tendency toward indecision. Committees, as was indicated above, tend to be indecisive. The time required for thorough deliberation, the tendency to discuss peripheral or tangential subjects, and the difficulty of reaching a common denominator are such that, when decisions are necessary, the committee device may not always be effective.

Tendency to be self-destructive. Where decision making is required by a group, there is a tendency for a group—as a group—to be self-destructive. The very indecisiveness of committees gives an opportunity for the chairman or for a strong member to bulldoze the committee into a decision. This behavior is typical of all groups, for it is a characteristic of people in groups that they look for and follow leadership; a group without a leader soon develops its leader from among its members. But when an individual within a group takes the dominant role, the nature of the committee, as a decision-making group of equals, changes, and there emerges a single executive with a group of followers or advisers.

Note that this self-destructive tendency has been limited to decision-making groups. In this form the committee is a plural executive, a case in which two or more individuals jointly fill a managerial position in the organization structure. It is a rare group of men who can participate in the exercise of authority on an equal team basis. Almost invariably, one of the group emerges as the strongest member and leads the others. In other cases, the members join in deadly combat until one of the group wins his point or until the group is disbanded by a superior authority. Occasionally, the true plural executive operates smoothly and efficiently, although even here one individual of the group usually dominates. Executives often delude themselves into believing that they operate on group-management principles with a group of coequals when, as a matter of fact, the "team" is composed of subordinate advisers or even yes men following the superior's leadership.

To some extent, even when a committee does not have a decision-making role, it tends to disintegrate into an assembly of individuals under the dominance of a leader or of leaders of two or three opposing factions. When the committee ceases to operate as a group of equals and especially when it becomes a battleground for warring camps, the politics of the situation may lead to decisions or recommendations worse than those weak ones based on the least common denominator.

Splitting of responsibility. Where a group of persons, acting as a group, is delegated authority to study, make recommendations, or arrive at a decision, the authority is necessarily dispersed throughout the group. And while it may be the intention of the delegant that each member assume this authority individually while still acting in concert with others, the fact is that the authority is delegated to the group as a whole. Thus, the individual members can hardly feel the same degree of responsibility that they would feel if any one of them were charged with the same task. It is this splitting of responsibility that is one of the chief dangers of a committee. Since no one individual can practically or logically feel accountable for the actions of the group, he can as honestly not feel responsible for his own action within it.

As was pointed out in the discussion of authority in Chapter 4, one of the principal social justifications of authority is that it enforces responsibility on its holder to use power effectively and efficiently to accomplish the duties for which it was delegated. Only an individual, however, can feel such an obligation. When authority is dispersed, responsibility is likewise dispersed.

Tyranny of the minority. In the discussion of other dangers of the committee form, reference was made to the tendency of committees to seek unanimous or near-unanimous conclusions or decisions. Even when committees operate along the tradition of majority rule, there is often a reluctance to base committee conclusions on a formal vote. Voting accentuates committee politics, may destroy some of such advantages as coordination and cooperation, and may endanger some of the loyalty-motivating forces involved in group participation. But even where a committee proceeds no further than the point at which the chairman can announce the "sense of the meeting," there is likely to be grounds for desiring unanimous action.

In these instances, minority members are placed in an extraordinarily strong position. By their insistence upon acceptance of their position or of a position to which they can agree, they can exercise an unwarranted tyranny over the majority. The minority members of a jury have such a power. The writers recall an important committee, comprised of nine members, in which a tradition for unanimous agreement developed. One member actually controlled the committee, not through his force of leadership, but through his power to withhold his vote. The matters which he so effectively blocked or on which he forced a watered-down conclusion fell in the area of committee authority and responsibility; the committee, having failed in its task because of the tyranny of this member, offered effective cover for the individual who caused the failure. It goes without saying that, had this member borne individual authority and responsibility for these actions, he could hardly have been the obstructionist he was.

The Plural Executive

In introducing the discussion of committees, it was indicated that they may be purely advisory, may be channels of information, or may be used in other ways than the managing of some portion of an enterprise. Most committees found in business are nonmanagerial in nature. However, there are many groups that are given the power to make decisions and to undertake one or more of the managerial functions of planning, organizing, staffing, directing, or controlling. It is this latter type of committee that is referred to as the plural executive. And it is to this type that most of the dangers of committee action apply.

Origin. The plural executive may be established by law, or it may result from a managerial decision.[7] As examples of the former, one may point to the board of directors of a corporation and the plural executive (commission, board, or administration) established by the various legislatures to operate one of their agencies. In the case of the corporation, as will be noted later, legislatures have traditionally required that an executive committee (the board) be elected to act in place of the corporation, since the latter is an artificial entity and, as such, holds the property contributed by the stockholders. While state and Federal legislatures have, especially in recent years, provided for direction of most government agencies by a single manager, in a great many instances the plural executive is created to operate the enterprise.

Various forms of executive committees are used within business organizations. A board of directors may have an executive committee to act on certain matters, which may later be ratified by the full board. The internal organization of business may have a number of managerial committees. Occasionally, a top executive committee undertakes functions usually handled by a president. More often, executive committees are established with limited authority in the management of some phase of a business. A good example is the merchandising committee of some department stores. Its membership may consist of the merchandise manager, affected buyers, the stylist, and the managers of the comparison bureau and the research department. Other typical business policy committees will be noted presently. Committees with comparable authority are found in nonbusiness enterprises also, and they deal with a wide variety of subjects.

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[7] For a history of the corporate executive see C. O'Donnell, "Origins of the Corporate Executive," *Bulletin of the Business Historical Society*, vol. 26, no. 2 (June, 1952).

Government agencies receive their authority directly from the legislative body, while the board of directors is required by statute to have authority delegated to it by the stockholders. But, in the case of the internal executive committees described above, the delegation is made directly to the group by the manager in question from his own authority, or the delegation is made directly to the individual subordinates with the thought that they may, if they have the initiative, confer in informal committee. But if the committee is to act as a plural executive, it must have and exercise authority to manage, no matter how informally this authority is delegated.

Location within organization structure. In those cases where the plural executive is required by law, its location either within or at the head of an organization structure is, of course, clearly defined. But internal committees may be found from the foreman level of management, where schedule committees are of particular importance, to higher levels, where broader issues are resolved.

Unclear nature of the plural executive. It has been emphasized that the true plural executive is one in which a group, rather than a single individual, has authority to manage, or at least to exercise certain of the managerial functions by having the power of decision. But this authority is not always easy to ascertain. Some plural executives, such as the board of directors, clearly have this power, although they may not exercise it. Some companies, like the Standard Oil Company (New Jersey) and the du Pont Company, are apparently managed from the top, on a day-to-day basis, by a plural executive. In Standard the plural executive is the inside board of directors meeting weekly, with an executive committee meeting daily, and in the du Pont Company an executive committee, comprised of the president and eight vice-presidents, meets weekly as a group to make major executive decisions.

There are, however, many executive committees which seem to have the power to manage as a group but which actually do not, since decisions are made by a prominent stockholder or a strong leader in the group. Usually the president is the dominant figure, and the other members are actually little more than advisers. Then there are cases where a committee is established only with advisory authority. In some instances, these committees actually operate as plural executives if, through tradition, weakness of leadership, or insistence of the chairman that the committee come to agreement before a decision is made, they actually make decisions or undertake managerial functions as a group. Like so many things in human affairs, however, the plural executive is not always what it seems, and a single executive is often in reality making the decisions.

The plural executive in planning. One of the areas of management in which the plural executive is most likely to be found is in the field of policy making. Many companies have an executive or management committee whose job it is to develop major plans and to adopt basic policy. They go by various names. General Motors has its operations policy and financial policy committees. Ford has its policy committee; the Chesapeake and Ohio Railway Company, its planning board; the Continental Oil Company, its management committee; the Westinghouse Electric Corporation, its planning committee; and the Phillips Petroleum Company, its operating committee.[8]

Naturally the extent of authority of these and other planning or policy-making committees varies considerably among organizations, although their influence on the decision-making process is perhaps greater in this area than in any other. These committees, by focusing so much of their attention on planning, also engage in control, for their interest in plans, to be truly effective, must be accompanied by some follow-up to make sure that events conform to them.

In the same way, these committees tend to decide organizational matters, not only because organization planning is necessarily an important phase of major planning but because the adequacy of the organization structure may affect and be affected by planning programs. This function, as Dale points out, is especially useful in the settlement of questions of organizational jurisdiction. The plural executive is an ideal arbitrator of this kind of dispute, since the determination of a group will be accepted as more impartial by contesting parties than would the decision of a single arbiter. It is also true that personality clashes are more submersible in group action.

Where committees are successful in policy formulation, however, they are dependent upon accurate and adequate staff work. A committee can hardly develop a proposal, forecast probable profits and costs from certain alternative courses of action, or investigate the numerous tangible and intangible factors influencing a basic decision. These are matters for study, and the committee is a notoriously poor study or research device. Therefore, if group deliberation is to be productive, facts and estimates must be carefully developed and presented, so that the members need not grope for material upon which to base their conclusions. It is perhaps not too much to say that a planning committee is no better than the caliber of staff work that prepares the problems for consideration.

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[8] For a discussion of these committees, see E. Dale, *Planning and Developing the Company Organization Structure*, Research Report 20 (New York: American Management Association, 1952), pp. 94 ff.

The plural executive in policy execution. Many companies and management scholars distinguish between policy formulation and policy administration. It has been said that the former is concerned with "the establishment of broad principles by which administration is guided," while the latter is concerned with "the daily conduct of the company's affairs—setting standards and procedures to guide and govern execution of policies, establishing controls to insure adherence to standards, solving inter-divisional disputes, improving inter-divisional coordination, and meeting various emergencies as they arise." [9]

In many companies this distinction is made, and special committees are established in given functional areas, such as engineering, distribution, manufacturing, public relations, and labor relations. These committees deal with the more specialized and technical aspects of planning and may make recommendations to the committees handling basic policy or may follow the formulation of basic policy with detailed enabling plans and programs. Thus, the General Motors Corporation has an administration committee, which, in turn, has many subcommittees, and the Ford Motor Company has an administrative council.

In reality, there is little difference between the policy-formulating committees and those that are thought of as administering policy. In both cases, the committees are engaged primarily in planning. The difference between the policy and administrative committees is essentially one of degree, with the former usually engaged in major planning and the latter engaged in minor or facilitative planning. But because they are facilitative and involve technical tasks requiring the work of specialists, the committee is sometimes far less effective than the single administrator. Nevertheless, where the specialized deliberations of such committees can proceed from carefully prepared staff work and the committee need only consider matters requiring judgment, group action can be as effective in this area of planning as in more basic policy formulation.

Occasionally, committees can be utilized not just to expand the area of planning but also to direct the accomplishment of plans, to assign tasks and authority, to select staff, and to follow up work. A committee is at a severe disadvantage in undertaking these managerial functions, as might be expected from the disunity of command involved, and is seldom as effective as the individual manager.

[9] *Ibid.*, pp. 96–97.

The Plural versus the Individual Manager

The multiple executive has been widely used in business and in government, although committees without managerial authority are far more numerous than those that are true plural executives. While much experience exists in organization with committees and with plural executives, the benefits of group management, as compared to individual management, have not been widely studied.

American Management Association survey of group versus individual decision making. One attempt to measure the merits of group versus individual management has been made by the American Management Association.[10] Through interviews with executives and analysis of records of some twenty representative companies, the association has found some interesting results. Breaking down the management functions into twelve different items, the survey makes a rough estimate of the proportion of the different management activities that can (1) be exercised effectively by committee (group) action; (2) be exercised effectively by committee action but more effectively by individual action; (3) be exercised by individual action, though helpfully supplemented by committee action; or (4) be effectively exercised only by individual action.

The results of this survey are summarized in Table 5:

Table 5. Relative Effectiveness of Individual and Committee Action in Functional Activities

Management function	*Can be exercised by committee effectively*	*Can be exercised by committee but more effectively by individual*	*Individual initiative essential but may be supplemented by committee*	*Individual action essential; committee ineffective*
Planning	20%	20%	25%	35%
Control	25	20	25	30
Formulating objectives	35	35	10	20
Organization	5	25	20	50
Jurisdictional questions	90	10		
Leadership	...	...	10	90
Administration	20	25	25	30
Execution	10	15	10	65
Innovation	30	20	20	30
Communication	20	15	35	30
Advice	15	25	35	25
Decision making	10	30	10	50

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[10] *Ibid.*, pp. 92–93.

Although the sample is small, breakdowns rough, and the number of cases assigned under each grouping no more than approximate, the survey does show what a group of top executives and a number of well-managed representative companies think of group, as compared to individual, executive action. In three of the four columns the effectiveness of the individual executive is superior to that of the committee, although in the two middle columns committee action is deemed to be helpful. This survey indicates only a strong preference for the plural executive in the settling of jurisdictional questions, although it is given a prominent role in the formulation of objectives and its usefulness noted in the activities of planning, control, administration, and communication. But the emphasis on the superiority of individual action in practically every phase of management is pronounced. In fact, this preference seems even stronger when the widespread use of committees in business organizations is considered. Even where committee action is found to be effective (the first two columns) though not in all cases as effective as individual action, the score in favor of committees, with one exception, is still not particularly high.

Effectiveness of the plural executive. Growing out of the foregoing discussion of the multiple type of executive are certain clearly defined impressions. Some things are done very well by this kind of manager. It succeeds fairly well in coordinating the activities of managers. It has a high potentiality quotient to define objectives, select alternatives for achieving them, and make summary measurements of the degree of success attained. In terms of the managerial functions, the plural executive is thus especially useful in planning and in certain of the broader aspects of control.

The plural executive also has serious weaknesses. It violates the principle of unity of command. Its cost in time and money, its tendency toward indecision or weak decisions, the splitting of responsibility, and the danger of tyranny by the minority—all weaknesses of the committee form —apply with special force to the true plural executive.

Use of Committees in Business

Businesses use the committee form in many ways. A summary of some of the more ordinary forms will be made here. It should be noted that they may or may not act as a plural executive and that one must always be careful to ascertain whether a committee, acting as a group, exercises one or more of the managerial functions.

The board of directors. The board of directors, in legal concept, if not in practice, is a true plural executive. It is charged by law with managing the corporation. Although some boards do actually manage the corporation and even operate it on a day-to-day basis, almost universally they discharge their duties by acting as the locus of legal and social authority and responsibility for the corporation. This means that boards undertake to restrict the firm's activities within the legal framework, to discharge honorably their fiduciary responsibility to the owners, and to make sure that corporate objectives and practices conform to the current social norms in order that the reputation of the firm will be honored by suppliers, investors, employees, customers, and competitors.

The functions and operations of boards of directors are considered in Chapter 13. It need only be said here that their managing activities vary widely in practice, even though basic planning, particularly the establishment of company objectives, and a degree of control in its interest are important and fundamental functions of most boards.

Executive or management advisory committees. Committees of this type are found in most business organizations, whether large or small. They vary in the degree of formality with which they are established, and they vary considerably in the degree of managerial authority possessed. Perhaps the most typical is the committee whose basic function is to advise the president of a corporation on questions of major company policies and procedures.[11] Its membership is customarily made up of the president and the key operating and staff executives reporting to the president, and it has an advisory authority relationship to him. It is, therefore, in the nature of a cabinet, although instances do exist where this kind of committee acts as a true plural executive. Its agenda will be as broad as the president's duties.

Financial committees. Particularly in the larger companies, one finds financial committees or accounting and finance committees. Such committees are likely to have the chief financial officer of the corporation at their head and to include such other key financial executives as the treasurer, the controller, the chief economist, and the controllers of the various operating divisions. This kind of committee reports to the president or executive vice-president and has authority to make recommendations for policies and procedures on financing, accounting systems, financial reports, and economic and financial matters affecting the company as a whole. Since a company can delegate to divisional and product managers authority over almost all its activities except that over finances, this committee is likely to be second in importance only to the executive committee itself.

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[11] The nature of this committee, as well as that of other committees discussed in this section, is based upon the experience of the writers and upon the American Management Association study. See Dale, *op. cit.*, Appendix B, pp. 178–187; also P. E. Holden, L. S. Fish, and H. L. Smith, *Top-management Organization and Control* (New York: McGraw-Hill Book Company, Inc., 1951), Sec. 4. Although top committees are often referred to as executive committees, they do not always have managerial authority.

Manufacturing committees. Another type of committee often found in business is concerned with the manufacturing activity. Sometimes it is combined with engineering or research committees or with new-products committees, although these are often found separately. This committee may be headed by the president, executive vice-president, or the manufacturing vice-president and will normally include among its members the vice-presidents in charge of engineering and sales and the heads of the products or territorial divisions of the company. It is not unusual to have the financial vice-president on the committee and such staff specialists as the economist and the market research manager. Its basic function is to coordinate manufacturing policies between the operating divisions of the company and its various functional departments.

Marketing committees. The problems of new products may be taken up in a manufacturing committee, a marketing or sales policy committee, or a special new-products committee. But within the scope of the typical marketing or sales policy committee falls that large and complex area of policy regarding the sale and distribution of a company's commodities, as well as questions concerning review and analysis of the company's product line. Such a committee would have both a considerable planning function and one of coordinating the company's interests in the efficient and effective selection, development, promotion, manufacturing, and distribution of the line of products. In some respects, this area is one of primary concern to top management or to a management advisory committee, but many companies have found that review by a special marketing or new-products committee is helpful in simplifying the problem before its submission to top management for decision.

The membership of such a committee would naturally include most of the functional departments of a business. One would expect it to be led by the president, executive vice-president, or the sales vice-president. Additional members would include the engineering vice-president (or head of product research), the manufacturing vice-president, perhaps the financial vice-president, and specialists in such fields as price estimating, patents and trade-marks, inventory control, economic planning, and distribution costs.

Other standing committees. Since the kinds of committees in use in the typical modern business vary widely, it is not possible even to describe those that may be regarded as customary. For in addition to those discussed above, there are a number of areas, primarily those requiring planning and coordination of functional or product assignments, in which committees are used.

Among these are committees on employee and public relations, including such important groups as wage-and-salary review committees, since this device is especially useful in obtaining objective judgments and in making sure that uniform standards are applied. Often, special committees are established to consider expense budgets, although the final establishment of such budgets is more likely to be placed in the jurisdiction of the top management or executive committee. Another widely used kind of committee is one dealing with pensions, benefits, and other matters relating to retirement. This kind of committee is especially useful, in that group judgment on these matters will probably be more generally accepted than decisions made by an individual.

Although studies of the extent of such committees have been rather limited, that made by Holden, Fish, and Smith[12] found that, in addition to those discussed above, standing committees on future business conditions, insurance, dues and donations, investment policy, patents, real estate, printing, forms, personnel appointments, procurement and inventory practice, and intradepartmental problems were also in use.

Special purpose committees. The committee device is also used for a number of special purposes. Such committees may be established for a very brief time, even as brief as for a single meeting to consider a special and nonrecurring problem, or for a rather long time to work with a program that might extend over months or even years. But the distinguishing characteristic of the special purpose committee is that it is organized for a purpose regarded as temporary at the time and is disbanded when the purpose is accomplished. Thus, in one of the large aircraft companies a committee was established to coordinate the development and sales of a special transport aircraft to the Air Force and was disbanded when the task was completed. In another business firm, a committee was established to make recommendations concerning a change in location of headquarters. When the recommendation on this subject was made and accepted, the committee had served its purpose and was disbanded. So far as it was concerned, no additional features of the problem needed to be considered.

Committees as special training devices. Occasionally committees are established with the primary purpose of serving as a training medium for managerial personnel, although they may also arrive at conclusions valuable to upper management. One of the most famous cases of this use of the committee form is the "multiple management" plan started in 1932 by McCormick and Company, Baltimore spice firm. This company established four boards, subsidiary to the main board of directors, and appointed young managers to them. The boards were to consider company policy matters and make recommendations to the senior board. While these recommendations have since proved to be useful in themselves, the basic reason for the subsidiary boards was to train young managerial personnel in the consideration of major company problems and to find promotable managerial manpower.

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[12] Holden, Fish, and Smith, *loc. cit.*

The multiple-management plan of the McCormick Company has been adopted in some five hundred other companies, although the form taken has naturally been subject to wide variation. Other companies make it a practice of assigning promotable men to special project committees, not only to see how they react to the necessary teamwork, but to find out how resourceful they are in approaching the solution of difficult problems. In still other cases, a group may be brought together purely for training. The agenda of the committee may include actual or hypothetical company cases or other matters on which group deliberation is believed to be appropriate. But there may be no thought or intention of using the committee conclusions as the basis for any policy action.[13]

Misuse of Committee in Business

The principal reason that the committee form has often fallen into disrepute in business is that it has been frequently misused. As was noted earlier, it is a device that has distinct advantages as well as strong disadvantages. If the business manager responsible for creating committees is especially aware of the dangers of the committee and the instances where it is misused, he can reap the benefits of this device with a minimum of its drawbacks.

Use in place of a manager, where a plural executive not required. The weakness of the committee as a managing device has already been noted. There are few managerial functions at which the committee is adept. Leading is essentially an individual matter. Decision making, if it is to be sharp, clear, prompt, and subject to unquestioned responsibility, is also more effective if exercised by the individual, as are direction and control of subordinates. Thus, when the committee is used as a manager, it is likely to be misused, if the criterion applied is effectiveness and efficiency of management.

There are times, it must be admitted, when effectiveness and efficiency of management are not overriding considerations. In certain governmental agencies the danger of putting too much authority in the hands of an individual may be so great as to supersede questions of pure efficiency. As a matter of fact, before criticizing the waste, duplication, and inefficiency of governmental management, one should face the question as to whether these costs are a fair price to pay for curtailing abuses of authority. Similarly, in business, a certain kind of decision may be so important to the welfare of the company and the dangers of abuse of authority so great that no individual should be entrusted with the power of decision in that area. But this would be an exceptional case.

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[13] For reference to the committee, as it has been used for training in business, see M. L. Mace, *The Growth and Development of Executives* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1950), pp. 185–187; and Dooher and Marquis, *op. cit.*, Chaps. 11–19.

One can hardly say that a committee has no place in the managerial process. As was noted in the analysis of types of committees, the advantages of group thinking and group participation in policy questions can be gained by making the committee's function advisory. Most business committees have this function, leaving the real task of decision making and managing to the line executives to whom they report. As Ralph Cordiner, president of the General Electric Company, has said, "We have no committees to make decisions that individuals should make." [14]

Use as a research or study device. One of the greatest misuses of the committee device is to employ it for purposes of research or study. A group meeting together can hardly engage in research or study, even though it may well weigh and criticize the results of study. It can be readily seen, however, that if a problem is posed and its solution requires data not available to a committee, no amount of discussion or consideration can turn up the missing information. This is essentially an individual function, even though, of course, individuals may be coordinated into a team with individual assignments to undertake the research.

Most committees, therefore, need staff assistance to function effectively. A research staff, providing analyses of alternative courses of action, summaries of historical information, or well-considered forecasts of the future, is an essential feature of any committee engaged in the development of business planning.

Use for relatively unimportant decisions. The dangers and weaknesses of the committee form should serve to restrict its use to the more important decisions. Even where the committee is clothed with advisory authority only, these drawbacks, plus the element of cost, should dictate that its use be limited to important matters. Moreover, no intelligent specialist or manager can help chafing as a result of the time wasted by a group deliberating at length on trivial subjects. This impatience reaches its frustrating climax when a committee member finds himself considering a question upon which a certain decision is a foregone conclusion.

Assigned decision area beyond authority competence of members. If appointees with authority attend the meetings or send duly empowered representatives and if the agenda of the committee deals with matters within the competence of the members, no authority problem will be encountered. But, altogether too often, the executive with the requisite authority cannot or does not attend the committee meeting and sends in his place a subordinate who has not been delegated his superior's power or who hesitates to bind his superior at the meeting. The result is that the committee cannot function as was intended. Delay results while the substitute member takes questions to his superior, and much of the advantage of group deliberation is lost.

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[14] Quoted in H. Maurer, "Management by Committee," *Fortune Magazine*, vol. 47, no. 4, p. 192 (April, 1953).

This reason is probably the most usual one for failure of the well-constituted committee. In a sense, it is inherent in the system. The committee is most useful in matters involving major policy. But major policy determination is ordinarily the province of relatively few upper-level executives in a business. If the same executive must be a member of a large number of committees, he cannot afford time to attend all meetings and must send various subordinates as substitutes, but he feels that he cannot delegate to his subordinate complete authority to bind him on any matter, a dilemma that causes many top executives to be so critical of the committee device. It must be admitted that careful preparation of agenda, so that a delegant knows precisely what will come before a committee and can receive the necessary authority to use at the meeting, and careful advanced study of proposals, so that the responsible executives can offer their opinion intelligently even by proxy, can do much to overcome this problem.

Of course, there are many cases of committee misuse where the committee as constituted, includes members whose authority does not fit the decision or discussion area. Often, to spread committee memberships, reduce the load of committee work, and increase the training and informational advantages of participation, individuals are appointed to represent points of view for which they have no authority. Thus, a committee may be constituted to establish advertising policy of a company. While it would doubtless be entirely proper for the sales promotion manager and the market research manager to be members, unless one of them can speak for the policy of the sales department as a whole, the committee may be unable to come to an effective conclusion and result in a wasteful use of manpower.

Use to consolidate authority better accomplished through organization. One of the disadvantages of departmentation is that authority is delegated to various executives in such a way that no single person in the organization, except the chief executive officer, has adequate authority to do some of the things that must be accomplished. Even within departments or sections, authority may be so splintered that group meetings are necessary to consolidate authority for making decisions.

A degree of splintered authority is unavoidable, and since the alternative to committee action might be the submission of too many problems to higher executives in a business, the committee would be an appropriate and useful device for consolidating such authority. At the same time, if the problem of divided authority can be more effectively solved by changing the organization structure and the delegations of authority made, recourse to a committee is certainly a misuse of the device. Whenever it is found that a committee form must be continually used to bring together authority in one place, the organization structure should be carefully scrutinized to make sure that the solution to the problem does not lie in reorganization.

Effective Operation of Committees

The costs and drawbacks of committee operation in business enterprise, as well as the tendency to misuse committees, should focus more managerial attention on their effective operation than is usually the case. Moreover, the democratic tradition in American social life, plus the increasing emphasis being placed on group management and group participation in business affairs, makes the problem of effective operation of exceptional importance to management. Despite its well-understood dangers, there is no evidence that the use of committees in business is declining. Indeed, there is some evidence that their employment within the framework of management has been increasing.[15] This fact calls for fresh attention to the problem of improving their use.

Need for well-defined authority and scope. One of the prerequisites for successful committee action is the need for well-defined authority and duties. Unless a committee's authority is carefully spelled out, the members may have some difficulty in knowing whether they are responsible for a decision, a recommendation, or merely some nonconclusive deliberation from which the chairman might gain some insights. Moreover, the members should know what scope of subjects or what duties the group may be expected to consider. Among the great inefficiencies of committee action are the tendency of the group to wander from the subject, and that of the chairman or others to force subjects on the committee that are beyond its scope. In some cases, the committee may get so far afield from its original purposes that there is little alternative but to disband it and appoint a new committee.

Furthermore, by knowing clearly what their functions and authority are, the members of a committee are better able to gauge whether they are meeting their responsibilities to the organization. Some companies thus make extensive efforts to review the work of committees, with a view to dissolving or consolidating those whose work is no longer justified. The Standard Oil Company of California, for example, has an evaluating committee that continually analyzes company committees in this way.[16]

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[15] See, for example, "Business Probes Its Own Structure," *Business Week*, Apr. 12, 1952, in which the statement is made (partly, but certainly not completely, on the basis of Dale's study on *Planning and Developing the Company Organization Structure*), "As companies get bigger, it is almost certain that committees will play a bigger role, again lightening top management's burden. Most companies already have some kind of group thinking, whether formal or not" (p. 44).

Appropriateness of membership. Of major importance to effective committee work is the nature of the committee's membership. Not only must the members be suitably representative of the interests they are intended to serve and possess authority requisite to committee action, but they must be able to operate effectively in a group. Even though social existence is contingent upon participation in numerous formal and informal groups, not everyone has the temperament, verbal and analytical ability, or capacity for working with others to make him an effective member.

Members should, for example, be able to express themselves clearly and easily in the presence of a small group. It is often surprising how difficult some able executives find this to be. Members, too, should have the capacity for reaching group decisions by integrating group thinking, rather than by seeking compromise or by forcing conclusions through political strength or that of position. Some individuals have the tendency to engage in hypothetical discussions of little help in reaching concrete results. It is a rare and pleasurable committee that does not have the committee bore among its membership.

In addition, committees are likely to be more effective in reaching agreement without weak compromise or power politics if the members are friendly, well-known to one another, and mutually respectful of one another's positions and interests. This means that the participants should generally be on approximately the same organizational level and be independent enough of one another that their deliberations can proceed without fear of reprisal. Where committees are used as the forum of the traditional dissenters or of the ambitious climbers anxious to use the rostrum for showing their talents, the waste of time and the lack of concrete results may be very marked.

As for the size of the most effective committees, no conclusions can be drawn. As a general rule, a committee should be large enough to promote deliberation and include the breadth of expertness required for its job but not so large as to be time-consuming or tend toward indecision. This is thought by some to mean that the committee should be as large as five or six members but no larger than fifteen or sixteen.[17] It is obvious that the larger the group, the greater the difficulty in obtaining anything approaching a "sense of the meeting," and the more time necessary to allow every individual to make his contribution.

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[16] For a discussion of this committee, see Dale, *op. cit.*, pp. 186–187.

[17] *Ibid.*, p. 90. W. H. Newman (in his *Administrative Action*, p. 234) believes, however, that a committee should be held down to three or four members. C. J. Berwitz in his "The Work Committee–An Administrative Technique," *Harvard Business Review*, vol. 30, pp. 110–124 (January, 1952), suggests a maximum of seven members.

One of the problems encountered in selecting appropriate membership of a committee is the question of representation. If a committee is established in order to have all interested parties participate in the deliberations, the number may be too large, and the group may be incompatible and ineffective. If all interests are not represented, the committee's work may be subject to criticism. Where representation is important, the answer may be found in a structure of subcommittees, with the problems to be considered properly broken down for subcommittee action. However, in many instances the need for representation is overstressed. The true purposes of committees are often accomplished by more complete staff preparation of items to be discussed, thereby bringing into consideration the various facets of a problem, and by limiting the membership to individuals who can look at the problem as a whole rather than regard their membership as a means of protecting a narrow interest.

Appropriateness of subject matter. Equally important to the appropriateness of membership is the need for limiting the committee to subject matter that can be handled in group discussion. The committee is not a good medium for gathering and classifying facts. Furthermore, as was noted in the discussion of the plural executive, there are certain activities—most of the managerial functions, for example—that can best be handled by individuals rather than by committees.

Certain kinds of subjects, therefore, can be handled effectively by committee action, while others cannot. Other than jurisdictional questions, where the prestige and impersonal nature of group action are definitely superior, most of the area for group action is in policy formulation or major planning. Along with planning, one finds the committee effective in exercising control, especially over those managers responsible for giving form and effect to major plans. The question of appropriateness of subject matter has also to do with the way subjects are presented to committees. The committee, being most valuable in handling basic issues, rather than in assimilating facts, can be made more useful if complicated items on the agenda are preceded by adequate staff work. The proposals made before the committee should be sharply presented, and the necessary facts carefully marshaled.

A well-prepared agenda. In order to make sure that the material presented to a committee and the questions raised are appropriate and that committee deliberations are addressed to points desired, an agenda must be carefully prepared. Ideally, an agenda should be available well in advance of the meeting and circulated to members, so that they may know what matters will be discussed. Even the cleverest and best-informed committee member can hardly be expected to have a considered opinion on important matters unless he is given some notice of what to expect.

Masses of carefully prepared recommendations available for cursory study at the member's place at the table seldom meet this need. Yet it is amazing how many directors and committee members receive their first glimpse of the material to be discussed when they find it neatly stacked on the committee table in front of them. The results are as might be expected. Either the time of a group is consumed in laborious study of the reports, or delay encountered while various members think aloud, or else the reports are meekly accepted by the members, the results railroaded by the chairman, or the meeting postponed to a later date when the members will have had an opportunity to study the proposals.

Hence, it is not only the careful preparation of an agenda that is important but the distribution of this data well in advance of the committee meeting.

Importance of the chairman. The effectiveness of any committee will never be greater than the skill of the chairman. A good chairman can avoid many of the wastes and drawbacks of committee organization by carefully planning the meeting, by preparing the agenda and making sure that the appropriate research is available to the members, by making sure that the meeting is faced with definite proposals for discussion or action, and by conducting the meeting so that the committee may function efficiently as a group.

The chairman sets the tone of the meeting. He may wish it to be formal or informal. He may desire that the argument be casual or pointed. By anticipating the objections of committee dissenters and pleading the devil's advocate, he may completely undermine many objections. When the subject matter of a committee discussion appears to be especially open to contention, the chairman may lead the discussion so that members are not forced to assume a position on the matter, at least until the subject has been fully discussed. Human nature being what it is, individuals who have taken a position are likely to defend it to the end. Since a committee is ordinarily designed to obtain results of group deliberation, it is important that the lines be not too sharply drawn, at least early in the discussion.

It usually falls to the chairman to integrate committee deliberation. Integration of ideas, as contrasted to compromise, is the building of a point of view, often quite new, from the basic positions of the group. If the chairman is a weak leader or if he is not fully familiar with the subject matter or the way individual members think, integration of ideas is not likely to result. Of course, it is possible that this leadership may be done for the chairman by one of the members of the committee, but when this happens, that member often becomes the *de facto* chairman of the meeting.

The chairman, also, must keep the discussion from wandering from the essential points. This often takes great skill, especially when the committee includes among its members persons who enjoy the sound of their own voices or who lack the ability to recognize essentials clearly and to speak of them concisely. The chairman must handle the meeting firmly, without imposing his own opinions on the members or thwarting the freedom of discussion, yet without yielding to the members his powers of chairmanship.

As a government administrator who has had long experience in the operation of committees has put it:[18]

> The chairman must be able to organize and guide thinking. He must know the objectives of the organization and the nature and extent of the problem to be solved. He must understand his superior executive's attitudes and be able to predict what he will or will not approve. He must know the operating organization's problems and attitudes and be able to predict staff reaction to any solution reached, if only so the findings will be understandable by those who did not have the benefit of working with the committee.
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> While the committee functions, the chairman establishes the sequence of elements to be discussed, makes assignments to committee members, coordinates and integrates subcommittees or members working independently. During discussion, he will often find it necessary to resolve conflicts and opposing view points on the basis of his own knowledge and experience or, if he has no reference points, through his ability to sense the emergence of the more "correct" approach. Sometimes he will have to stimulate thought when none is forthcoming voluntarily. All this calls for ability to cajole, reprimand, and soothe; for qualities of alertness, aggressiveness, calmness, objectivity; for a knack of envisioning theory and projecting it against practice. And, needless to say, no chairman can be really successful unless he commands the respect of his colleagues.
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> I am, of course, describing a "wonder boy." Success is not dependent on securing such a man; but success is the more likely the nearer these specifications are met. . . .
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> The pleasant, firm, capable leader with knowledge and ideas, who can open and close debate at will, who recognizes and capitalizes on the strength and weaknesses of his committee, who accepts majority opinion wherever possible, generally fares the best. For through his ability and skill he wins the respect and admiration of the group, and at the same time he is able to sense and control any of the arch-personalities the moment danger signs appear.

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[18] Berwitz, *op. cit.*, pp. 112, 122. Among some of the difficult personalities Berwitz mentions as problems for the chairman are the genius, the frustrated man, the "inferiorated," the lazy man with ability, the cocky oversimplifier, the stubborn man, and the "lone wolf." The experienced chairman will recognize these problem types immediately.

Thus, the chairman of a committee must be chosen with great care. On his shoulders falls most of the responsibility for assuring that the committee acts as a group. Obviously, his job is greatly helped if the members are well selected, if their authority and abilities are appropriate to the task, and if the subject matter of the committee is suitable. Even a skilled chairman can hardly make up for the deficiencies of a poorly constituted committee.

Checking committee conclusions. One of the advantages of the committee device is that it allows a group of people to participate in the solution or discussion of a problem and to be informed simultaneously concerning it. Yet, there is a danger that individuals will walk away from meetings with varying interpretations as to what the committee has actually discussed or decided. To avoid this possibility, it is usually well to prepare careful minutes of the meeting, have them circulated in draft for corrections or modifications, and then have the final copy approved by the committee. This procedure has the advantage of forcing committee members to agree or disagree upon the results of the discussion and the further advantage of supplementing oral discussion with the written word.

A second important aspect of checking upon the conclusions of a committee is to provide for some follow-up of a committee's actions. If a committee has made a decision, good management practice would appear to demand that control be undertaken to assure that events conform to this decision, and control reports should be made to the committee. If a committee makes a recommendation to a superior manager, the group should be informed as to the action, if any, which has been taken on the recommendation. If the recommendation is not followed, the preservation of committee morale, plus the education of membership on management policy, would seem to require some explanation. If a committee makes neither a decision nor a recommendation but is merely used as a forum for the exploration of ideas, it is valuable for some report to be made to the membership as to what happened.

This kind of follow-up on committee operations is an important requirement for success. Individuals are certain to feel the sense of participation if they know that they really have participated. They will also become better-trained committee members if they know how their deliberations were used and how and why they were modified by others.

The committee must be worth the cost. Above all, in ensuring the success of committee operation, one must continually question whether the committee's benefits to the company are worth its cost. The purpose of committees is to gain through groups something that cannot be gained through individuals. It may be difficult to account for the benefits, especially when they take the form of such intangibles as morale, enhancement of status, teamwork, and training. But those who bear the responsibility for efficient organization must never overlook the fact that the committee can be justified only if the often considerable costs of group action are definitely offset by tangible and intangible benefits.

Selected References

Berwitz, C. J., "The Work Committee—An Administrative Technique," *Harvard Business Review*, vol. 30, pp. 110–124 (January, 1952).

Dale, E., *Planning and Developing the Company Organization Structure*, Research Report 20, pp. 83–97. New York: American Management Association, 1952.

Davis, R. C., *The Fundamentals of Top Management*, pp. 468–487. New York: Harper & Brothers, 1951.

Dooher, M. J., and V. Marquis (eds.), *The Development of Executive Talent*, Chaps. 11–19. New York: American Management Association, 1952.

Given, W. B., *Bottom-up Management*, pp. 3–50. New York: Harper & Brothers, 1949.

Hader, J. J., "Committee Process and Committee Chairmanship," *Handbook of Business Administration*, pp. 1676–1684. New York: McGraw-Hill Book Company, Inc., 1951.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control*, pp. 59–74. New York: McGraw-Hill Book Company, Inc., 1951.

Maurer, H., "Management by Committee," *Fortune Magazine*, vol. 47, no. 4, pp. 145 ff. (April, 1953).

McCormick, C., *Multiple Management*, pp. 1–155. New York: Harper & Brothers, 1938.

Newman, W. H., *Administrative Action*, Chap. 13. New York: Prentice-Hall, Inc., 1951.

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THE BOARD OF DIRECTORS

One of the most interesting organizational devices of the business management scene, established in the form of a plural executive, is the board of directors. Its importance to American business management is sometimes underestimated. One organization devoted to the study and rating of managerial effectiveness has made this surprising statement about boards: [1]

> The Institute, after study of thousands of corporations, is convinced the greatest single weakness in American business organization lies in the composition of the average board of directors. . . . In fact, more than one-half of the correspondence of the American Institute of Management, in answer to inquiries from the outside, is now concerned with matters regarding directors.

State laws under which corporations are established almost invariably require that the corporation be "managed" by a board of directors comprised of at least three members. The logic behind this requirement is that the corporation is an artificial entity, established by a sovereign power through contract with a group of owners (the stockholders), and, as such, must have real persons responsible for management. Historically, this has been in the form of the plural executive, a board of directors.

In concept, the directors stand in the place of the real owners of the corporation, the stockholders. They are not legal agents of the stockholders but rather the elected representatives of the owners of the corporation and are charged, as a group, with the duty of managing the corporation. In other words, the stockholders own the corporation, and the corporation owns the assets of the incorporated business. While this distinction may appear to be rather tenuous, it has tremendously important legal implications. Among these are separation of the liabilities of the corporation from those of the stockholders, thereby limiting the liability of the latter; a legal immortality apart from the more transient nature of real persons; and an ability to make contracts and own property quite distinct from the legal powers of the individual owners.

Authority of Boards of Directors

The corporation is established by contract with a sovereign power—the state—and its authority is that conferred by this contract. While some corporations have been established by special legislative acts, most are created by the various states under general incorporation acts, which set forth the procedures by which the privilege of incorporation can be obtained, the powers of corporations so created, and the limitations on their authority. However, since it is a settled principle of law that a sovereign power cannot contract away its sovereignty, all corporation charters are issued in contemplation of existing law and of all future legislation that may be necessary for the protection of the health, morals, safety, and welfare of the people or for effective prosecution of any other essential incidents of sovereignty. A state may thus charter a corporation to manufacture and sell alcoholic beverages, but this contract must give way to any later legislation outlawing such activity.

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[1] American Institute of Management, *The Corporate Director,* Special Issue 15, p. 4 (December, 1951).

The board of directors, as the managing head of the corporation, has the authority to exercise the powers of the corporation, subject to any limitations that may be found in the bylaws. In addition to repeating many of the powers outlined in the charter, the bylaws generally include matters having to do with the internal government of the corporation. Thus, they will usually contain rules regarding rights of stockholders, the powers and qualifications of directors, the issue and transfer of stock, the sale of assets, annual stockholders' meetings, directors' meetings, methods of making contracts, and rules empowering directors to authorize proper officers to handle funds, sign checks and contracts, and undertake other corporate activities.

The Functions of Boards

Observation of boards of directors in typical American corporations leads to the belief that many boards actually do not manage or direct the operations of a corporation. Managing, in its usual sense, is the job of the president and other chief officers of the typical corporate enterprise. Indeed, corporate boards have often been criticized for not directing the affairs of the business.[2] The separation in the large corporation of ownership and management has sometimes tended to make the inside managerial group all-powerful and the board of directors a legal sham. The existence of prominent stockholders, often controlling with a minority interest, has occasionally made boards of directors willing approvers of the wish of the controlling interest.

Yet, boards of directors do have an important managerial job to do. Under the corporation laws they are charged with the duty of managing the entire corporation in the place of the stockholders, who are often so numerous and unorganized that they can take no part in the determination of corporate policies. Moreover, as will be noted later, directors have definite liabilities for their conduct, particularly under the Securities Act of 1933 and the Securities Exchange Act of 1934. Furthermore, the criticism of American business in the decades after 1933, coupled with increasing legal liabilities, has caused a reawakening to the importance of the board and its proper functioning in the modern corporation. Baker, in his study published in 1945,[3] found that many directors have come to realize more clearly their responsibilities and liabilities. Furthermore, much attention has been paid to the problems of improving board operation and of increasing the quality of board members.

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[2] W. O. Douglas, "Directors Who Do Not Direct," *Harvard Law Review*, vol. 47, pp. 1305–1334 (June, 1934).

Trusteeship. Perhaps the most important single function of a board of directors may be summed up in the term "trusteeship," the husbanding of the assets of the corporation for the benefit of the stockholders. Even the most ineffectual board cannot escape this obligation.

Sometimes, especially in the large, publicly held corporation, the concept of trusteeship will extend beyond a feeling of obligation to the stockholders to include trusteeship to the public, without whose support a business or a corporation as a social institution could not endure; to the employees of the corporation, whose efforts are necessary for its success; and to the customers, who buy its products. The position may be taken, on the other hand, that a director has the duty to operate exclusively for the benefit of the stockholders. It is their funds that he manages. To manage them for the benefit of others might be interpreted as misappropriation of private property. At the same time, should it prove in the interest of the stockholder to administer for the benefit of employees or the public generally, such actions would, of course, be on behalf of the stockholders. With the lessening of privacy of the large business corporation, the awareness of the important role of labor forced on management by unionism, and an enlightened attitude toward the human factor in business, such is often the case. Nevertheless, where directors forget that their first obligation as directors is to the corporate owners of the business whose funds they manage, there is a real question as to whether they are living up to their trust.

Determination of enterprise objectives. Another major function of a board of directors is the establishment of the general objectives of the business. It is not enough to say that a business has as its objective the making of a profit, although this is properly the basic objective of all business. This primary objective must also be translated into enterprise goals and into the formulation of major policies by which these goals are put into action. These include such considerations as those of products, fields of operation, organizational framework, and type of financial structure and financing.

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[3] J. C. Baker, *Directors and Their Functions* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1945), p. 134.

Selection of executives. An essential function of any board of directors is the selection of the president for their corporation. Indeed, this is a broad policy-making matter, normally with long-run implications.

The importance of the board's function in selecting the chief executive is clearly set forth by Copeland and Towl in their study of business management: [4]

> Policy-making and the choice of an executive are both functions of the board of directors, and in fact they are closely related. Every action by a board of directors regarding the choice of a new executive involves policy examination. If the man chosen is expected to follow the course of his predecessor, that is a reaffirmation of the predecessor's policies, a decision to proceed as before. When a board maps out a new course preliminary to the choice of an executive, or when it accepts policy changes as conditions of acceptance stipulated by a candidate, a board of directors is making a long-run decision on policy matters.
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> In numerous ways, therefore, the effects of the decision reached by a board of directors in choosing a new executive will be apparent for a long time in the future.

While boards of directors do actually elect corporate officers other than the chief executive officer, or president, most directors regard it the job of the president to nominate these officers. This is as it should be. The chief executive is the operating head of the corporation, responsible to the board of directors. If he cannot be held responsible for his lieutenants, he can hardly be considered responsible for the successful operation of the corporation as a whole.

Checking on results. One of the unavoidable functions of a manager is control, the ascertainment that events are conforming to plans. Directors, by establishing corporate objectives and formulating major policies, are of course doing basic planning. The function of trusteeship is, in a sense, an obligation of stewardship to the stockholders for the successful operation of the company. Clearly, if directors are to plan and to be responsible to stockholders, they must check on results of their policies.

Such an evaluation involves more than a review of financial statements and the receipt of an audit from an independent auditor responsible to the board. From the financial side, it should mean a careful review of forecasts of cash availability, operating expenses and revenues, and capital expenditures. While an audited financial statement may disclose that funds have been honestly received and disbursed, it does a director little good to find, when all the statements for the prior year are in, that the company became insolvent some months before. If the board is to control, it must check on results while they are occurring and, ideally, before they occur.

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[4] M. T. Copeland and A. R. Towl, *The Board of Directors and Business Management* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1947), p. 32.

The breadth of this control should extend beyond financial matters into the entire area of policy formulation. If the board has decided that authority should be decentralized and that organization should proceed along product division lines, the board should have some means for determining from time to time whether the organization, as developing, reflects the board's policy. If the board has established a product-development policy, it should check on current and anticipated results. If certain basic personnel policies have been established by the board, its area of control should extend to them. Too often, boards of directors approve policies and planning programs and then forget them.

Approval of budgets. Final approval of budgets is usually one of the key functions of boards of directors. Budgets, whether applying to cash, revenues, expenses, capital expenditures, or number of employees, are essentially planning instruments, whereby anticipated results are reduced to numerical terms. After such a plan is adopted, it then becomes the standard against which actual performance is measured for a given period in the future. Budgets are thus both planning and control devices. To the extent that they are focused on over-all corporate affairs, as would be the case of budget summaries for an enterprise, they are properly subject to board approval.

Securing long-range business stability. An often-overlooked function of boards of directors is the securing of long-range business stability in a changing physical, social, and biological environment. Barnard has remarked that, while formal organization is "omnipresent and inescapable," it is a fact that "successful cooperation in or by formal organizations is the abnormal, not the normal condition." [5] In other words, even though people have a natural propensity to organize and though many organizations exist at any one time, few survive, since most fail to keep their objectives and techniques in tune with a changing environment. From the standpoint of business, these environmental forces include changes in technology, changing markets, new and different tastes, varying political and economic conditions, and the growth of new business institutions, such as the chain store or the supermarket.

A director, with his detachment from the everyday operations of a company and with wide experience, can furnish a breadth of viewpoint that can be utilized to call to the attention of management need for changes in objectives and techniques. As Copeland and Towl have

[5] C. I. Barnard, *The Functions of the Executive* (Cambridge, Mass.: Harvard University Press, 1938), pp. 4–5.

pointed out, a competent board, operating as a group, has "a vitality which transcends the membership of the individual directors." [6]

There are those who feel that securing long-range stability is the fundamental function of a board of directors. As one writer has said, "Board and management alike are in the business of avoiding calamity, of preserving the company, maintaining its personality, ensuring its continuity." [7] In other words, as the corporation form is designed to furnish immortality, so it is the duty of the board of directors to accept responsibility for survival as a kind of article of faith.

Distribution of earnings. Another major function that must be exercised by directors, at least to meet the requirements of corporation law and the obligations to stockholders, is that of the distribution of earnings. Directors must decide whether earnings should be distributed to owners as dividends, whether they should be retained in the business for expansion, or whether they should be utilized to eliminate outstanding indebtedness.

When a director decides the policy to be followed in this respect, he is making a decision of exceptional importance. If he decides that earnings should be distributed to owners, he is taking the position that the owner would rather have immediate earnings in hand than invest in future earnings of the business or in capital gains. Should he decide to keep the earnings for expansion, he is, to some extent, forcing owners to reinvest funds in the corporation. Likewise, if earnings are to be used to retire debt, the director is once more exercising his trusteeship of the investor's funds. The distribution of earnings is, to the stockholder, second in importance only to the actual utilization of his original capital investment. Yet, directors, altogether too often, regard the distribution of earnings as a financial planning matter without the serious implications of trusteeship this function necessarily implies.

Asking discerning questions. Throughout the study of directors and their functioning, it has been found that one of the significant functions of a director is to ask discerning questions, an ability that does not depend upon a detailed familiarity with the affairs of a business.[8] Such a question forces the proponents of a policy proposal, usually the corporation's executives, to defend their proposal with facts or considered judgment. It seeks to make sure that all facets of a problem have been explored, that all facts have been considered, and that alternative courses of action have been properly rejected. While such questions are not designed to represent cross-examination nor to discredit the corporation's management, they are frequently thought of by managers as embarrassing questions.

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[6] Copeland and Towl, *op. cit.*, p. 24.

[7] H. Maurer, "Boards of Directors," *Fortune Magazine*, vol. 41, no. 5, p. 130 (May, 1950).

[8] For an analysis and case materials on this important function, see Copeland and Towl, *op. cit.*, Chap. 6, and Baker, *op. cit.*, pp. 19, 81, 131, 133.

The asking of discerning questions is an ability that comes from experience in decision making; consequently, some of the best corporation directors are those, not who know every detail of a company's operation, but who have had experience dealing with a variety of situations. Such persons often develop an intuitive feeling about a business problem and know almost instinctively the kind of evidence and considerations likely to affect it.

Perhaps more important than the effect of discerning questions on a board's deliberations is their effect on the study and preparation of a proposal before it is submitted to the board. The corporation executive who knows that he will be asked such questions will naturally try to anticipate them, and the executive's staff will take far greater care in its study and analysis if its members know that their superior may be embarrassed by a failure on their part.

Moreover, as Copeland and Towl emphasize in their study, the asking of discerning questions has special legal significance. Where state laws require that directors meet and that certain items be approved by the directors, the courts have often held that stockholders of a corporation have a right to expect conscientious deliberation from their directors. The exchange of views required for such deliberation is definitely established by a record which shows that discerning questions were raised and discussed.[9]

Board Procedures

Baker, in his pioneer case study of boards of directors,[10] has found four basic variations in the ways boards carry out their functions. A board of directors cannot manage a corporation in the sense that the department heads administer their departments. Being a plural executive and being concerned with questions of over-all policy for the corporation as a whole, the board generally does a minimum of administrative work.

Nevertheless, one of the four major procedures of boards is *decision making*, after joint deliberation on the problem to be decided. As Baker points out, the board makes original decisions in areas in which it can hardly delegate authority. Such areas include the selection of the chief executive, the determination of fundamental business objectives, and basic changes in capital structure.

Another procedure may be characterized as the *confirmation* of decisions made by corporation executives that require board approval.

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[9] Copeland and Towl, *op. cit.*, pp. 96–99, and cases there quoted.

[10] Baker, *op. cit.*, pp. 16–20.

Such matters as entry into important contracts, settlement of lawsuits against the corporation, selection of banks, and approval of major planning programs requiring important capital expenditures are examples. The top officers of an airline company, for instance, might make banking arrangements, tentatively agree to contracts calling for the purchase of aircraft, or make tentative agreements with another airline for the establishment of a joint operation, but these matters would be brought to the board for confirmation and would not be regarded as binding until they were so confirmed.

A third procedure is that of *counseling* informally with operating executives. Corporation managers often thus present a policy question or a program proposal to the board members, in order to benefit from their preliminary thinking and advice. Such questions may be discussed at length in board meetings, sometimes off the record, without any idea of immediate decision but rather with the purpose of obtaining advice and counsel.

Finally, Baker found that successful and effective boards functioned through *review* of management programs, reports, and even facilities. This review, unless objections are raised, represents a kind of tacit approval of the management's actions. It also acts as a control on these actions, for if an operating executive knows that his major plans and actions will be reviewed by the board and that he must report on them, he will be motivated to make them reflect the objectives and policies of the board.

Liabilities of Directors

While directors are not, in the ordinary sense of the word, trustees, since they do not hold the assets of the corporation in trust for the stockholders, the law requires them to act with the same reasonable care that a prudent man would exhibit in handling his own property. With the exception of certain matters specifically prohibited by law, the courts have applied a "reasonable man" doctrine, in the absence of fraud or gross negligence. In other words, the courts have not often held directors responsible in cases where poor judgment was displayed. Recognizing that reasonable men take risks, sometimes of a very dangerous character, and that punishment for mistakes in judgment would constitute an unwarranted interference with the free enterprise system, the courts have tended, when the action seemed reasonable under the circumstances, to decide cases of liability by giving the benefit of any doubts to the accused directors.

Specific liabilities of directors. Although state corporation laws differ in their definition of directors' liabilities, there have been a few areas in which such liabilities are fairly specific. One of these is the approval of courses of action beyond the powers of the corporation, as these powers are set forth in the charter or as defined by statutes applying to corporations or businesses generally. Directors who cause loss or damage to the corporation by forcing it to act illegally may be held liable for so doing. Another area in which a director may be held liable is the transfer of property from the corporation with intent to defraud creditors. In some cases, where a corporation declares dividends without the existence of surplus or earnings, the directors may be held liable. It is also an established principle of law that directors may not lend corporate funds to themselves or to other stockholders unless, as is the case of the typical credit union or of expense advances to officers, special provision for such action has, usually in the bylaws, been made. The purpose of this limitation is, of course, to prevent those inside the corporation from taking undue advantage of their position, with consequent danger of loss to stockholders or creditors.

Liabilities under Federal securities laws. Perhaps the most stringent limitations on directors may be found in the Federal securities laws. For the purpose of preventing unfair use of corporate information by insiders, the Securities Exchange Act of 1934 regulates trading in a corporation's stock, listed on a regulated exchange, by directors, officers, and persons owning directly or indirectly more than 10 per cent of any class of the company's stock. Such persons are prohibited from engaging in short sales of the corporation's stock. Should they buy stock and sell it within six months, the law presumes that these persons are operating on the basis of inside information and makes the profits so realized recoverable to the company. In order to police this provision and to give other investors information concerning the financial stake of their officers and directors, the law provides that, where a corporation's securities are listed on a regulated exchange, insiders must file information monthly with the exchange and with the Federal Securities and Exchange Commission, showing their ownership interest in the company and any changes that have occurred during the month.

There is no doubt that these limitations on speculation and the requirement of disclosure of information as to ownership have curtailed the use of information to the advantage of insiders. To say that this provision has eliminated this advantage or has eliminated speculation in the corporation's securities is quite another thing. The law cannot stop a director or other insider from evading the regulations by advising a "friend" to buy and sell for him. The buy-and-sell limitation, furthermore, applies only to short-term operations under six months; if a director wishes to hold the securities for more than that time, as he is likely to want to do under the capital-gains provisions of the income-tax laws, there is no reason that he cannot use his inside position for some advantage.

Among the very real liabilities of directors are the full-disclosure provisions of the Securities Act of 1933 and the Securities Exchange Act of 1934. Under the former law, a corporation (except for exempt companies) wishing to offer new securities to the public must file a registration statement with the Securities and Exchange Commission. This statement and the prospectus based on it must incorporate considerable information concerning the finances, operations, and management of the company. Should the statement contain an untrue assertion of material fact, omit a material fact, or omit such facts as would make it misleading, members of the board of directors, as well as many other persons connected with the corporation, are liable for losses incurred both by first and subsequent purchasers of the security.[11] Moreover, the losses are normally recoverable should there not be full disclosure within the meaning of the law, whether or not the purchaser had read the registration statement.

In addition to the full-disclosure provisions of the Securities Act applicable to newly issued securities, similar provisions are applied to already issued securities under the Securities Exchange Act. All corporations having securities listed on a regulated exchange must file reports periodically with the exchange and with the commission, detailing extensive financial, operating, and management information similar to that required in the registration statements for new securities. The same kind of civil liabilities for false and misleading statements applies to these reports, although it is not quite as severe as in the case of new issues of securities. For the purchaser to recover under this law, he must prove that he relied on the false or misleading statement in purchasing the securities of the company filing it.

When these acts were first passed in 1933 and 1934, the extensive liabilities caused considerable concern among many directors who had sat on boards without taking an active part in the affairs of the corporation.

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[11] The law requires that the statement be signed only by a majority of the board, although every member of the board is made liable for the civil penalties under the law. However, a director who has not signed the registration statement may escape liability if he resigns before the effective date of the statement and advises the commission that he will take no responsibility for the accuracy or completeness of facts in the registration statement. According to the law, purchasers have a right of action against any or all of the following: (1) every signer of the registration statement; (2) every director or partner in the issuing company at the time the statement was filed; (3) every person who has consented to be named in the statement as being, or as about to become, a director or partner; (4) every expert who has consented to be named in the statement as having prepared or certified data used in it and subsequently found to be faulty; (5) every underwriter of the issue; and (6) every person who controls any of the above, unless he had no knowledge of, or reasonable grounds to believe in, the existence of the facts giving rise to the liability.

As a result, those not wishing to expose themselves to such great liability resigned. But, as the years have passed and the laws have been administered judiciously, as corporation officials have come to understand the requirements of full disclosure, and as the actual suits for damages have proved to be few, directors have learned not to fear the securities regulations unduly. On the other hand, no director of a corporation that sells securities to the public takes these liabilities lightly, and they have had, on the whole, a salutary effect on corporate directors.

Legal liabilities versus ethical conduct. While board members are subject to legal liabilities, the danger to directors is not really very great. Nor can it be said that these liabilities interfere much in practice with the functioning of directors in the absence of outright fraud or neglect. The law properly does not place directors in a strait jacket: it recognizes that a person who must make business decisions should be allowed to take risks, make mistakes, and exercise relatively free judgment.

There is, however, an area of directors' conduct that might be classified as legal but of questionable ethical standard. Though it is not unlawful for directors to use their inside information for personal profit at the expense of other stockholders so long as the specific limitations of the securities laws are met, it is hardly ethical to do so. Certain state incorporation laws, such as those of Delaware, do not require the corporation to offer new issues of a class of stock to old stockholders in prorata amounts so that the existing proportionate equities of all stockholders are not disturbed. Even though this preemptive right is not required by a state law, there is certainly an ethical question when a group of insiders cause the corporation to issue new shares of stock to themselves at a favorable price, without making the same kind of offering to all stockholders. As can be readily seen, a sale of stock below its real value to certain stockholders takes away some of the equity of those to whom the stock is not offered.

In this latter category of conduct is the tendency in recent years to offer insiders options for large blocks of stock at advantageous prices. This riskless offer makes it possible for a favored few to acquire stock at a fixed price. Should the value of the stock increase, the option holder has a valuable gift. Should the value decrease, the option holder, at least until he exercises his option, has taken no risk. While indiscriminate offering of stock options is subject to criticism as being a gift of a portion of stockholder equity to those so favored, there are times when such options are entirely justified. High income-tax rates have made it virtually impossible to reward good management through the payment of salary. Because profits from options, properly handled, qualify for the lower capital-gains rates of the income-tax law, the corporation may be justified in compensating managers through the stock-option device. The question of ethical conduct does not arise from the granting of options per se but rather from the cases where options are used to give undeserved profit to insiders.

Some Factors in Board Operation

In view of the importance of effective leadership in any organization and the position of the board of directors organizationally at the top of the corporate pyramid, some of the problems met in the actual operation of boards are worth consideration. There are many special management problems, although most, as will be recognized, arise from the essential difficulties and weaknesses of the plural executive.

Size. As is well known in any committee operation, the number of its members will affect the efficiency of its operation. It has been said that "a directorial board of ten is an executive body and a board of over thirty a debating body." [12] While not entirely true, the statement does emphasize the influence of size. A board may be so small that it does not permit proper representation of varied experiences and points of view, and it may be so large as to be unwieldy. However, the quality of membership and the character of leadership may be more important factors.

A number of studies of the size of boards have been made. One of the most comprehensive was made by the National Industrial Conference Board in 1946.[13] On the basis of a survey of 522 nonfinancial corporations ranging widely in size, the number of members was found to vary as follows:

Table 6. Average Board Membership by Company Size

Asset group (thousands of dollars)	*Number of directors*														*Average number on board*
	3	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*Over 15*	
Under 1,000....	9	7	20	6	15	5	3	1	1	...	...	1	...	...	5.9
1,000–9,999.....	4	3	44	22	55	8	37	5	15	7	2	3	1	2	7.6
10,000–49,999...	...	...	11	3	18	13	29	7	27	10	9	7	5	6	10.0
50,000 and over.	...	...	1	1	6	1	15	6	11	13	12	9	15	11	12.3

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[12] "The Responsibilities of Directors," *The Economist*, vol. 113, p. 916 (November, 1931).

[13] P. W. Dickson, *Compensation and Duties of Corporate Directors*, Studies in Business Policy, No. 16 (New York: National Industrial Conference Board, Inc., 1946).

A study published by Gordon in 1945 and covering 155 nonfinancial giant enterprises showed that these corporations had boards averaging 13.5 members.[14] Even in this group, Gordon found that 4 companies had boards with as few as 6 members and that, at the other extreme, there were boards, such as those of General Motors and du Pont, with 35 members.

Gordon ventured the opinion that a board of 6 to 12 men would be small enough to be effective and large enough to gain diversity of experience and point of view. Bates has suggested a board of 5 to 12 directors.[15] On the basis of these conclusions, it appears that most corporate boards are probably too large. This factor, plus a lack of concern for attendance and an eagerness to have certain special-interest groups represented, may account, more than is sometimes realized, for the questionable performance of many boards.

Composition of boards. The composition of boards of directors is more important to the welfare of a corporation and the quality of its management than is mere size. Several studies have been made of this matter, and while none of them is based on recent data, the results are probably not out of line with the situation that exists at present.

The National Industrial Conference Board study of 1946 disclosed that in 521 companies furnishing information, approximately one-half of all directors were full-time paid officers.[16] In one-tenth of the companies reporting, all the board members were officers. The study showed, however, that the proportion of officer-directors tended to vary inversely with the size of the companies. In firms with less than a million dollars in assets, nearly two-thirds had boards in which the officer-directors were in a majority, while only a little more than one-third of those with assets above 50 million dollars had boards in which the officers held a majority or more of the memberships.

Gordon's study of boards in 155 giant corporations found similar evidence. In these boards, officer representation accounted for an average board membership of 35.9 per cent of all members, but in only 23 per cent of the boards were the officers in a majority.[17]

The second most important group in the typical board of directors are the holders of substantial stock. The Conference Board study indicated that one in five directors, on the average, represented a substantial holding of stock. Gordon's study, even though limited to very large corporations, showed a similar ratio. This does not mean, of course, that the typical board of directors, especially of the larger corporations, represents extensive stockholdings. One study made of the 200 largest nonfinancial corporations disclosed that directors, as a group, owned only 6 per cent of the common and 2 per cent of the preferred stock of these corporations.[18]

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[14] R. A. Gordon, *Business Leadership in the Large Corporation* (Washington: Brookings Institution, 1945), p. 117.

[15] *Ibid.*, p. 118; G. E. Bates, "The Board of Directors," *Harvard Business Review*, vol. 19, p. 86 (October, 1940).

[16] Dickson, *op. cit.*, pp. 4–5.

[17] Gordon, *op. cit.*, p. 119. Note that Gordon found the average percentage of officer board members to be 43.1 in industrials, 32.7 in utilities, and 21.4 in railroads, for an over-all average of 35.9.

Among the outsiders found on corporate boards, other than those representing substantial stock, the most prominent of them either represent other industries, have financial connections, or are lawyers. This may be perhaps best seen by the following compilation of reasons for inclusion of nonofficer members on the boards of the companies studied by the National Industrial Conference Board in 1946:

Table 7. Per Cent of Corporate Directors Classified by Interest or Occupation *

Reason for inclusion on board	*Number of directors*	*Percentage of total*
Owns or represents substantial stock..........	636	33.9
Prominent businessman (industrial executive)..	420	22.4
Financial counsel (banker, broker, investment).	289	15.4
Legal counsel..............................	217	11.6
Retired or former officer....................	87	4.6
Consultant with specialized knowledge........	56	3.0
Insurance counsel..........................	20	1.1
Educator.................................	10	0.5
Prominent community figure................	34	1.8
Others....................................	108	5.7
Total number of directors..................	1,877	100.0

* *Compensation and Duties of Corporate Directors* (New York: National Industrial Conference Board, Inc., 1946), p. 6.

Informing the board. That most companies do make an attempt to keep directors informed is apparent from the Conference Board's study, which showed that 70 per cent of the companies gave the directors some kind of interim report to acquaint them with financial and operating data.[19]

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[18] *The Distribution of Ownership in the 200 Largest Nonfinancial Corporations,* Monograph 29, Temporary National Economic Committee (Washington: Government Printing Office, 1940), p. xvi.

[19] Dickson, *op. cit.*, pp. 10–11.

But only about 25 per cent of these companies submitted agenda of meetings beforehand.

Perhaps the principal means of keeping directors informed, other than in the board meetings themselves, is through informal contact between various nonofficer directors and the officers of the corporation. Such contact is especially likely to be found in companies that draw their directors from the locality of their headquarters but it is also practiced in larger companies. The Conference Board study already referred to disclosed that over 90 per cent of the officers of the largest companies consulted nonemployee directors informally between meetings, while officers in 95 per cent of the smallest companies did the same. However, this study does not disclose the frequency and extensiveness of these contacts, and it is probable that they are not as general as the data would indicate.

A number of companies have embarked upon special programs designed to increase the information available to directors.[20] Rather complete financial data, including some in chart form, reports on operations, and special reports on unusual problems or situations are being given to boards of these companies, as are reports of board subcommittees, regularly made budgets and forecasts, newsletters, and special reports outlining tangible and intangible factors supporting or discrediting a planning program. Elsewhere, it is unfortunately still true that too many companies fail to keep their directors adequately informed.

Director's compensation. It has been a long-recognized fact that directors, as a group, are the lowest-paid segment of the American managerial hierarchy. In 1938, for example, the National Industrial Conference Board reported that, of 468 companies with outside directors on their boards, 318 companies, or 68 per cent, paid less than $25 per meeting attended, with $20 the usual fee, and only 2.3 per cent of the companies studied paid $100 or more per meeting.[21] The average annual amount paid to outside directors per year was found to be $285 at that time, in contrast to an average of approximately $5,000 for 19 English companies reported in the study.

In 1945, the Conference Board reported that board fees had risen somewhat with the average fee for more than 500 companies being $50 per meeting and with one-sixth of the companies paying meeting fees of $100 or more.[22] On an annual basis, outside directors realized an average of $850 in fees, including compensation for special committee meetings of the board. Moreover, the practice of paying directors an annual salary has been growing. In 1938, the Conference Board found that only 19 of 468 companies placed outside board members on an annual salary, while in 1945 a total of 80 of 479 companies followed this practice.

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[20] For an excellent summary of these programs and suggestions for their betterment, see F. Lusardi, *Keeping Corporate Directors Informed*, Studies in Business Policy, No. 24 (New York: National Industrial Conference Board, Inc., 1947).

[21] *Prevailing Practices Regarding Corporation Directors*, Studies in Administrative Control, No. 2 (New York: National Industrial Conference Board, Inc., 1939), pp. 16–17.

[22] Dickson, *op. cit.*, pp. 6–8.

Nonmonetary incentives. In view of the low compensation paid to directors, there must be other incentives to serving on boards. One of these is the prestige of being counted among the select group that head the affairs of a corporation.[23] Even in smaller concerns, this prestige may be considerable.

Another incentive is the professional challenge implied in such service. The use of an individual's experience and talent for the solution of basic policy problems, matters calling for important intellectual effort, has a strong appeal to many men, as does the broadening nature of experience in different businesses with varying problems. Many persons, too, are motivated by the simple desire to be of service in their community and to encourage the development of management as a high professional calling.

It cannot be denied that many directors find reason for such service in the business advantages to be gained. The representative of a large bank may find the board of directors an important channel of information to a customer who needs considerable bank financing; a lawyer may find the board membership to be important to the expansion of his legal clientele. While ethical, and often legal, questions arise when a director sits on a board doing business with his firm, even the director who scrupulously avoids voting on matters affecting his other interests will find that his association with the other members of a corporation's board has important advantages to him.

The Board in Small Corporations

One of the overlooked aspects of management by directors is the place of the board in small corporations. As can be well understood, boards in smaller businesses tend to be mere legal forms, with the prominent owner or owners and their immediate families comprising the board of directors. Indeed, it is not unusual for the necessary minutes of such boards to be prepared by legal counsel to cover matters required by state laws, while the actual operation of the board is practically nonexistent.

At the same time, there are many small businesses that have found the board of directors a useful tool for improving the quality of their management. While the problems and approaches of the small, in contrast to middle-sized or large, corporations, differ considerably, recent studies have indicated that the board has a special and important role in the small corporate business.[24]

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[23] For an interesting analysis of these incentives, see Copeland and Towl, *op. cit.*, pp. 152–171.

Reasons for lack of effective boards in small business. Perhaps the dominant reason that the typical small corporate owner does not attach much importance to the board of directors but makes it only a family board is his essential distrust of outsiders. Having built his own business from a garage machine shop or a basement office in his home, the small-business owner understandably regards it as his offspring, his life, and his prized possession.

Moreover, the owner may feel timid in asking outsiders to sit on his board of directors. He may feel that his banker or lawyer or a management consultant would have no incentive to serve on such a board and that the small corporation could not make it worth the while of these persons to give of their time. This attitude is not helped by the corporation lawyer who may disparage the efforts and position of his small client or the banker who may look upon the small business as a difficult and not too profitable customer. On the other hand, there are many public-spirited business and professional men who see in the small business the heart of the American private enterprise system, a challenge to professional experience and ingenuity, and a means of being of genuine service in the building of well-managed business enterprise. After all, there is greater cause for admiring the aggressiveness, skill, and entrepreneurship required to develop a new business and make it prosper than for admiring that used in carrying on the successful expansion of a large business, with its sources of readily available capital.

Peculiar functions of small corporation directors. A small corporation is usually at a peculiar disadvantage compared to its larger brother. Being small, it cannot afford the specialized talent, both managerial and technical, of the large business. Yet its problems do not vary, other than in degree and scope, from those of the large corporation. The owner-manager of the typical small corporation frequently has several important blind spots, both in education and in experience. The outside director, in contrast with high-priced consulting talent, can be extremely useful in at least partly eliminating them.

One of the key functions of outside directors in the small corporation is the making of policy. These guides to action are often overlooked by the small business manager who allows himself to be overburdened by recurring operating problems and details that could easily be handled by reference to an established policy. An outside director can often assist materially in this respect.

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[24] An excellent study of this role has been made by M. L. Mace and reported in his *The Board of Directors in Small Corporations* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1948). This study, which should be read by every owner of a small corporate business, has been used in this section to supplement the authors' own experience.

One of the weaknesses often displayed by managers of the small business is their failure to plan ahead. Sales and production dips come without warning. Income taxes come due, without ample cash on hand. Inventories build up, and working capital becomes frozen before the manager realizes what is happening. The temptation to accept orders without thought of the capital required to produce them sometimes causes the owner to become overextended in the midst of promise of profits. An outside director, whose approach to the business is uncluttered by day-to-day problems will be able to bring the necessary foresight to this kind of problem.

Similarly, the review and reestablishment of basic company objectives in light of new technical, political, or economic developments may be overlooked by the harassed owner-manager but will be natural subjects for consideration for the more detached outside director. Problems of management succession become especially important to the small business, which normally has no ready supply of understudies trained to take over active management. Misunderstandings or jealousies of corporate owner-managers and their key subordinates may reach exaggerated proportions if left unsolved. The interests of minority stockholders may well be overlooked by the ambitious owner of a majority of the stock in a small corporation. These and other problems, while not peculiar to the small corporation, are likely to be aggravated in it. Their solution requires skill, tact and an objective point of view, qualities that can be found in the well-selected outside board member.

In addition to these special functions, the board member of the small corporate enterprise also can serve the business valuably in the many ways any director serves any corporation—by asking the discerning question, by placing the business in tune with the community, by checking on results.

The Board of Directors: Conclusions

The board of directors, while clearly a plural executive in *form,* often fails to carry out its managerial responsibilities. In the large corporation, these functions are likely to be exercised by the group of operating executives or by a prominent controlling stockholder. In the small corporation, the board is seldom more than a legal form required by law and treated as such by the owner-manager or owner-managers. Yet to think of the board as an anachronism of antiquated corporation law or as a totally ineffective form of organization is clearly shortsighted.

The effectiveness of boards. The effectiveness of boards of directors is frequently questioned. That this question is not new is evident from the following quotation from Adam Smith, who wrote in his *Wealth of Nations* in 1776: [25]

> The trade of a joint stock company is always managed by a court of directors. This court, indeed, is frequently subject, in many respects, to the control of a general court of proprietors. But the greater part of those proprietors seldom pretend to understand anything of the business of the company; and when the spirit of faction happens not to prevail among them, give themselves no trouble about it, but receive contentedly such half or yearly dividend, as the directors think proper to make to them. . . . The directors of such companies, however, being the managers of other people's money than of their own, it cannot be well expected that they should watch over it with the same anxious vigilance with which the partners in private copartnery watch over their own. . . . Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company.

This kind of criticism of directors has prevailed to the present day, although the high flood of criticism of the 1930s has largely subsided in the 1950s. Even so, as Baker points out in his study, directors have been criticized as being "complacent," "rubber stamps," "back-scratchers," "logrollers," "irresponsible," "self-dealers," "incompetent managers who do not know what their duties are and treat these perfunctorily," and "members of an exclusive club who conform to a social pattern." [26]

There is no doubt that criticisms of this kind are often justified. The large corporation, with its separation of ownership and management and its tendency to allow self-perpetuation by a group of insiders, may tend to make the board of directors a weak and useless managerial instrument. There are doubtless many boards which act only in name, which carry out few of the functions of a board, and which act as willing servants of a dominant stockholder, a controlling insider, or a better-informed operating executive.

At the same time, evidence exists that boards of directors are more effective than generally realized and are taking an increasingly important role in management. The increased legal responsibilities placed on board members by the securities regulations of 1933 and 1934 have played an important part in forcing board members to take their role seriously, as have the criticism, suspicion, and regulation of the New Deal and Fair Deal. An increasing number of top managers are developing a philosophy of director trusteeship. One such credo of directorship is the following statement of F. W. Abrams, chairman of the board of the Standard Oil Company (New Jersey): [27]

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[25] *Wealth of Nations* (New York: Modern Library, Inc., 1937), pp. 699–700.

[26] Baker, *op. cit.*, pp. 20–21. See also Douglas, *op. cit.*

[27] Quoted in H. Maurer, "Boards of Directors," *op. cit.*, p. 107.

> We have a stewardship in a company like Jersey Standard and a personal pride. We would like to leave the company in a sounder and more assured position than when we took it over. We are not looking to the company just to support us; we want to make it healthy for future generations and for the employees that will come along. We like to feel that it is a good place for people to work. We have equal responsibilities to other groups; stockholders, customers, and the public generally, including government. What is the proper balance for the claims of these different sections? . . . Keeping the proper balance in these things is one of the most important things that boards of directors have to consider. The corporation is a kind of team; it is a great moral drive of many persons.

Yet, with this increased effectiveness, it must be remembered that corporation boards cannot be expected to manage in any detailed or broad sense. The level of management of the board, as indicated earlier, is in the area of establishing objectives, making broad and general policy decisions, and undertaking those functions that, for one reason or another, cannot be delegated to the officers and their subordinates. Being a plural executive in form, a board could hardly be expected to exert a much broader managerial role. But within these proper functions, depending as they do on a sense of trusteeship, on the necessity for deliberation and judgment, and on the practice of checking upon actual use of authority by those operating managers to whom it is delegated, this plural executive is perhaps in its best organizational role. In other words, it can be said that the board should not be held responsible for *managing* a corporation but should be held responsible for *seeing* that it is well managed.

Attunement to the community. The ability of an organization to endure depends largely upon the way it keeps step with changing social objectives, technical developments, and economic and political change and the manner, therefore, it keeps itself attuned to the community. Since the board of directors has as its principal functions the maintenance of such stability and the establishment of goals, there is a tendency to judge the quality of boards by the ability with which these things are done. Jackson Martindell, founder of the American Institute of Management, thus makes this consideration a principal one by which boards of directors are appraised.[28]

Civic activities, as well as devotion of some time to charitable causes, are sometimes felt to be evidences of the attunement of the director or executive to the community. In this connection, it is interesting that a survey made by the American Institute of Management of the outside activities of 100 executives in 10 leading corporations disclosed some deficiencies on this score.[29] Out of a total of 817 activities of these executives, a total of 586, or 72 per cent, were in clubs, societies and fraternities; 144, or 17 per cent, were in business associations; and only 87, or 11 per cent, were in community or public activities.

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[28] See, for example, Jackson Martindell, *The Scientific Appraisal of Management* (New York: Harper & Brothers, 1950), pp. 11 ff., where this fact is implied; and more especially the appraisals of individual corporations in *The Corporate Director.*

The age of directors. Martindell, in his study of corporate managements, has been particularly critical of the average age of directors.[30] He found that 57 per cent of the directors of 75 large corporations were over sixty years of age and that only 12 per cent were under fifty. This high average age of board members has been held by Martindell to indicate the honorary, rather than active, character of boards and the inevitability among boards of cultural lag. This criticism is, of course, not necessarily true in any given instance, although the danger does exist, and many of the better-managed corporations are attempting to lower the average age of their boards.

Inside versus outside boards. One of the critical issues found in the analysis of boards of directors is the question of how many, if any, members should be selected from the ranks outside a corporation. Some of the best-managed corporations in the nation have boards made up entirely of inside members and argue persuasively that only men intimately familiar with a company can capably make major policy decisions. Yet, when this occurs, the functions of operating executives and of the board of directors are merged. As the National Industrial Conference Board observed in its 1939 study, "There is some question whether such a situation is desirable, since the board members sitting as directors are merely approving the action of the board members in their executive capacities, a situation that is faintly reminiscent of Pooh Bah's stratagems in *The Mikado*." [31] Others who have examined the problem come to similar conclusions.[32] The point is rather effectively made that, since the board has the ultimate responsibility for basic policy, for the selection of top operating executives, for the authorization of major expenditures, and for seeing that the long-run interests of the stockholders are protected, boards of directors consisting wholly of insiders are an organizational anomaly.

However, it must be admitted that the mere existence of outside board members, while changing the form of the board, may not mean any change in its substance. Gordon points out that in many companies the inside group nominate and elect the outside members of the board and that, in doing so, as effectively control these outsiders as if they were members of the inside management team.[33]

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[29] "Corporate Executive's Public Responsibilities," *The Corporate Director*, October, 1951, p. 3.

[30] Martindell, *op. cit.*, pp. 11 ff.

[31] *Prevailing Practices Regarding Corporate Directors*, *op. cit.*, p. 12.

[32] American Institute of Management, *The Corporate Director*, Special Issue 10, p. 3 (1951); Bates, *op. cit.*, p. 79; W. T. Blair, "Appraising the Board of Directors," *Harvard Business Review*, vol. 28, no. 1, pp. 103–104 (January, 1950).

At the same time, the inclusion of some outsiders on a board of directors may provide good insurance that the corporation's leadership will have the advantage of a broader and more diversified experience, and that it will be more accurately attuned to society. It is exactly for this reason that the American Institute of Management, in its appraisals of the quality of management of various corporations, rates down those corporations that do not include outside members on their boards.

While the inclusion of outside directors is generally to be approved, question may be raised when too few insiders are included. Depending upon the size of a corporation and the complexity of its problems, it is well to have represented on the board those key corporate executives responsible for major segments of the company's activities. Just as outside points of view may be needed to give corporate policies the breadth and intelligence required for the best solution, it is likewise necessary that enough regular and responsible participation of those familiar with the activities of the business be available for the board.

The professional director. In order to increase the effectiveness of boards by bringing in outsiders and yet obtain persons of unusual competence who will give the required time and attention to their task, proposals have often been made for broadening the practice of employing professional directors. The professional director is an individual who devotes all or most of his time to being a director, usually of several noncompeting companies in which he holds no other executive position, and who receives as his compensation a fairly good retainer from all the companies. This practice has long been followed in England, where it is not unusual for an experienced business or professional man to hold five or six directorships, each of which may bring a retainer of five or ten thousand dollars per year.

Professional directors have not been widely utilized in the United States, although there is a slightly growing tendency to compensate more outside directors on an annual retainer basis. In the study made by the National Industrial Conference Board in 1939, approximately 85 per cent of the responding executives opposed use of professional directors.[34] Apparently some of this objection came from the use of the term "professional," largely because persons questioned felt that such an expert would mix unduly in the administrative affairs of the business. Also, it must be recognized that the study, having been directed mainly to officers, may have contained biased evidence. The study made by the Conference

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[33] Gordon, *op. cit.*, pp. 121–122.

[34] *Prevailing Practices Regarding Corporation Directors, op. cit.*, p. 9.

Board in 1946 used other terminology. At that time, slightly more than half those queried favored the idea of having some directors who would represent no particular group, would hold directorships in a number of noncompeting corporations on an annual salary basis, and would be able to give more time than the usual outside director to board functions.[35]

As a matter of fact, English experience with the professional director has not always been too satisfactory. In some cases the salary and title have been used to pension members of an owning family or to bring to a board the prestige of one of the nobility, thus trading an annual stipend for the advertising value of a prominent family name. On the other hand, there have been a large number of cases in which experts in general management and in various functional fields have served British corporations with great distinction and value.

The idea of the professional director has much to commend it. It should serve to bring an objective, disinterested, and competent element to a board of directors. As the importance of boards becomes increasingly recognized, it is reasonable to expect that the professional director will appear more often on the American business scene.

The ideal board. Although opinions may vary as to what characteristics the ideal board of directors should possess, it is interesting to note the type of board given the highest rating in the American Institute of Management audits.[36] In 1951, this firm gave its top scoring to the board of the General Foods Corporation. This was definitely an outside board, with 11 of its 17 members having no executive position in the corporation, although one of the outsiders was a former officer and another was the largest stockholder. These outsiders fixed the salaries for all insiders. The 9 directors, other than the director who was the largest stockholder, represented important interests, including several commercial and investment banking companies, an Eastern college, a law firm, and a manufacturing company. The 7 members of the board who were active members of the corporation's executive group represented the important top-management and functional divisions of the company. The entire board had an average age of fifty-eight, with the ages of its members varying from forty to seventy-three.

In other respects, this board met the institute's standards. Its members were active in civic, business, charitable, and other community affairs, thereby showing an awareness to the importance of attunement with the community. The members worked well as a team, were actively responsible for the corporation's role in promoting the interests of stockholders, employees, and the public, and apparently took their functions as directors seriously. Since all members lived within commuting distance of New York, regular meetings were well attended. Because of the effective managerial leadership of such men as Colby M. Chester, former chairman of the board, Clarence Francis, chairman in 1951, and the other top officers, evidence exists that the board actually functioned in a fashion that best management practice demands.[37]

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[35] Dickson, *op. cit.*, pp. 17–19.

[36] "How to Appraise a Management," *The Corporate Director*, Special Issue 10, pp. 9–10 (1951).

Revitalization of boards. From the above discussion, it is clear that corporate boards of directors have an important role in the management of enterprise. Although subject to the various inherent drawbacks of the plural executive, these boards stand at the apex of the pyramid of corporate organization. The character of the business leadership, the tone of managerial policy, and the basic direction of the enterprise are among their far-reaching duties. With the recent focus of attention upon corporate responsibilities and with the searching studies that have recently been made, one can expect a revitalization of boards as effective molders of business policy.

The issues in making boards of directors effective instruments of management are clear. But these issues cannot be resolved unless those who control the corporation come to realize that boards must be more than another managerial committee. These persons must develop an awareness that boards have important functions in establishing enterprise objectives, in shaping the basic organizational framework of the corporation, in properly staffing the top executive jobs, in deciding major policy issues, and in exerting control over the planning and performance of the corporate executives. Much of the difficulty to date stems from the fact that the functions of boards have not been adequately appreciated and that the line subordinates of directors—the key corporate executives—have actually controlled many boards. There are signs now, however, that the authoritative position of boards is coming to be recognized and their effective independence encouraged. The duties of the board of directors are of such nature and of such importance that the advantages of group deliberation may offset the costs of group decision making.

SELECTED REFERENCES

American Institute of Management, "Corporate Executives' Public Responsibilities," *The Corporate Director*, October, 1951, p. 3.

"Thirty-six Basic Rules for Boards and Directors," *The Corporate Director*, November, 1950, p. 304.

Baker, J. C., *Directors and Their Functions*. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1945.

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[37] For a summary of the institute's interesting set of thirty-six rules by which corporation directorates are judged, see "Thirty-six Basic Rules for Boards and Directors," *The Corporate Director*, November, 1950, pp. 3–4.

Bates, G. E., "The Board of Directors," *Harvard Business Review*, vol. 19, no. 5, pp. 72–87 (October, 1940).

Blair, W. T., "Appraising the Board of Directors," *Harvard Business Review*, vol. 28, no. 1, pp. 101–113 (January, 1950).

Copeland, M. T., and A. R. Towl, *The Board of Directors and Business Management*. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1947.

Dickson, P. W., *Compensation and Duties of Corporate Directors*, Studies in Business Policy, No. 16. New York: National Industrial Conference Board, Inc., 1946.

Douglas, W. O., "Directors Who Do Not Direct," *Harvard Law Review*, vol. 47, pp. 1305–1334 (June, 1934).

Gordon, R. A., *Business Leadership in the Large Corporation*, Chaps. 6, 12, 14. Washington: Brookings Institution, 1945.

Lusardi, F., *Keeping Corporate Directors Informed*, Studies in Business Policy, No. 24. New York: National Industrial Conference Board, Inc., 1939.

Mace, M. L., *The Board of Directors in Small Corporations*. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1948.

Martindell, J., *The Scientific Appraisal of Management*. Chaps. 2, 3. New York: Harper & Brothers, 1950.

Maurer, H., "Boards of Directors," *Fortune Magazine*, vol. 41, no. 5, pp. 107 ff. (May, 1950).

Prevailing Practices Regarding Corporation Directors, Studies in Administrative Control, No. 2. New York: National Industrial Conference Board, Inc., 1939.

14

MAKING ORGANIZATION PRINCIPLES WORK

Perhaps organization is the most fully developed area of management theory. Its importance was earlier recognized than that of other aspects of management, and its principles have been the more completely explored and developed. While many principles undoubtedly remain undiscovered, the area is a fruitful one to analyze with a view to determining how to make these principles work.

Organization Charts: Their Use and Limitations

One of the tools for making organization principles work is the organization chart. Any organization which exists can be charted, for a chart is nothing more than an indication of how departments are tied together along their principal lines of authority. It is, therefore, somewhat surprising to find the number of top managers who take pride in not having an organization chart or who feel that organization charts should be kept a secret.

The reasons for organization charts. A prominent West Coast manufacturer once informed the authors that, while he could see some use for an organization chart for his factory, he had refused to chart the organization above the level of factory superintendent. His argument was that charts tended to make people feel like superiors or inferiors, tended to destroy team feeling, and gave persons occupying a box on the chart too great a feeling of security. Another top executive informed the authors that such charts made people feel they had a lifetime claim on a certain management position, adding that, if the organization were left uncharted, not only would it be easier to change it, but there would continue to be a competitive drive for higher executive positions on the part of the uncharted middle-management group.

These reasons for not charting the organization are, of course, untenable. Subordinate-superior relationships do not exist because of charting but rather because of essential authority relationships. As for any too-comfortable feeling engendered and a lack of drive for those who have "arrived," these are matters of leadership at the top, of recognizing the need for reorganizing whenever the business environment demands, of developing a tradition of change rather than inflexibility, and of making sure that subordinate managers continue to meet adequate and well-understood standards of performance.

The manager who believes that team spirit is engendered without clear delegations of authority and clear spelling out of relationships between managers is deluding himself. Without definite lines of authority, the way is prepared for politics, intrigue, frustration, buck passing, lack of coordination, duplication of effort, vagueness of policy, uncertainty in decision making, and other evidences of organizational inefficiency.

Since a chart maps lines of authority, sometimes the mere charting of an organization will show inconsistencies and complexities and lead to their correction. A chart also acts as a guide for managers and new personnel in an organization, revealing how they tie into the entire structure. Charts are, therefore, not only evidences of organization planning but also road maps for decision making, and training devices for those who would learn how a company is organized. It is hardly surprising that Holden, Fish, and Smith found in their survey of companies in 1941 that those firms that had comprehensive organization charts—and many companies did not—appeared to have the soundest organization plans.[1]

Limitations of charts. Although organization charts are useful, necessary, and often revealing tools, they are subject to many important limitations. In the first place, a chart shows only formal authority relationships and omits the many significant informal and informational relationships that exist in a living organization. Moreover, it does not picture how much authority exists at any point in the organization. While it would be interesting to chart an organization by showing flow lines of formal authority, with different widths to denote varying degrees, authority is not subject to such measurement. Moreover, the myriad lines of informal relationships and of information, if drawn, would so complicate a chart that it would lose its value as a guide. At the same time, something of this nature can be achieved by accompanying organization charts with clear statements of authority and duties of each management job.

Furthermore, too many organization charts tend to show organizational lines as they are supposed to be, or as they were at the time the chart was drawn, rather than as they really are. Too often, managers hesitate or neglect to change charts, forgetting that organization is a dynamic thing and that a chart cannot be allowed to become obsolete through lack of necessary redrafting. If charts do not reflect actual organization and if the organization is intended to be as charted, it is the job of effective management to see that actual organization conforms with that desired. Organization charts cannot supplant good organizing, nor can a chart take the place of spelling out authority relationships clearly and completely, of outlining duties of managers and their subordinates, and of defining responsibilities.

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[1] P. E. Holden, L. S. Fish, and H. L. Smith, *Top-management Organization and Control* (New York: McGraw-Hill Book Company, Inc., 1951), p. 93.

Another limitation of organization charts is that they may, in the absence of a tradition of change and effective managerial leadership, tend to bring rigidity into organization. But there is no reason why charting *should* impose any such inflexibility. If organization is changed to meet needs and if charts are currently maintained to reflect these changes, a tradition of flexibility can be established. Moreover, the very existence of charts gives managers something on which to base consideration of need for continuous organization review.

Still another difficulty of organization charts is the fact that individuals concerned may confuse authority relationships with status. The staff officer shown reporting to the president of a corporation may be placed at the top of the organization chart, while a regional line officer may be shown one or two levels lower. While good charting will attempt, as far as possible, to make levels on the chart conform to levels of importance in the business enterprise, it cannot always do so. This problem can be handled by clearly spelling out authority relationships. As Dale states in his study of organization, even though field commanders in the military are shown below staff officers, they do not object to this placement so long as their rank is equal or higher and their duties reflect their position.[2]

The Need for Spelling Out Relationships

Authority relationships and functions of managerial personnel should always be spelled out clearly, and definition of them should be as detailed as that of job descriptions for assemblers or mechanics if the organization is to function as an instrument of management.

As one large and well-managed company, which has given much attention to organization, has pointed out, description of managerial jobs furnishes a blueprint of management.[3] Although all the intangible and undefined aspects of a managerial position, especially those at higher levels, cannot be spelled out, the need for attempting to define and describe relationships resulting from usage and corporate practice nonetheless exists.

Not only is such clarity of relationships important to the manager and to those with whom he must coordinate his efforts, but it has other important uses. It plays an important role in organizational planning and is also a tool of considerable value in management training, since it reflects specifications needed by an incumbent of a position. It also has value in comparisons of one job with another and in determination of remuneration.

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[2] E. Dale, *Planning and Developing the Company Organization Structure* (New York: American Management Association, 1952), p. 148.

[3] G. L. Hall, *The Management Guide* (San Francisco: Standard Oil Company of California, 1948), pp. 1–2.

But the important function of managerial job description is to explain and define the organization. The more completely relationships can be spelled out, the clearer the organization will become. By showing up vagueness of authority, the cumbersome nature of communication lines, and inefficiencies of levels or spans, job description may be a means toward improvement. And, at the very least, this spelling out can furnish a standard against which the effectiveness of much managerial performance can be measured.

Organization Objectives and Planning

As in all phases of management, establishment of objectives and orderly planning are necessary for good organization. As Urwick has said, "Lack of design [in organization] is illogical, cruel, wasteful, and inefficient." [4] It is illogical because good design, or planning, must come first, whether one speaks of engineering or social practice. It is cruel because "the main sufferers from a lack of design in organization are those individuals who work in an undertaking." [5] It is wasteful because "unless jobs are clearly put together along lines of functional specialization it is impossible to train new men to succeed to positions as the incumbents are promoted, resign or retire." [6] And it is inefficient, according to Urwick, because, without dependence on principles, management reverts to personalities, with the resultant rise of company politics. For "a machine will not run smoothly when fundamental engineering principles have been ignored in its construction." [7]

The need for objectives. But organization cannot be designed unless there are objectives, not of organization per se, but of the enterprise as a whole. Over-all goals will determine basic organization structure, while departmental objectives can decide the general character of such organization units as production, sales, finance, personnel, or public relations. One large manufacturer, in fact, recently discovered, in planning a reorganization, that it was necessary to go back to the basic goals of the company and work them out carefully in order to find where to begin reorganizing.

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[4] L. Urwick, *The Elements of Administration* (New York: Harper & Brothers, 1944), p. 38.

[5] *Ibid.* In this connection Urwick quotes the following lines from Browning:

> "It's an awkward thing to play with souls,
> And matter enough to save one's own."

[6] *Ibid.*

[7] *Ibid.*

The relationship between objectives and organizational consequences is interestingly shown in the following breakdown accomplished by the A. C. Gilbert Company of New Haven, Connecticut: [8]

Over-all objectives

1. Preservation of the American Way of Life (opposing monopoly in any form, whether in industry or labor unions)
2. Being a good citizen in communities of operation; assuming a share of community responsibilities
3. Research, development of know-how and an ever-advancing technology
4. Making the company a better place to work; getting enjoyment out of work; good wages; fair play; recognizing the dignity of the individual; maintaining a progressive personnel program

Organizational consequences

1. A limit to the expansion of the organization; absence of tie-in agreements and other organizational devices which might aid monopoly
2. Establishment of a "Department of Relationships"
3. Establishment of a separate research department
4. Establishment of a personnel department

Financial objectives

The company should make enough profit to

1. Continually improve plant facilities and working conditions so that production may become more efficient and work more pleasant
2. Provide a reasonable return to common stockholders
3. Aim toward maintaining the soundest financial structure possible, with particular emphasis on maintaining a good liquid position
4. Consider banks as friends and as absentee members of the company; their interests to be recognized in the financial policies

Organizational methods of accomplishing these objectives include

1. Capital budget procedures and follow-ups
2. A centralized department for the establishment of accounting, cost and budget controls with additional decentralized advisory departments and control agencies
3. A centralized fund and bank loan procedure

Sales objectives

1. Highest quality products
2. Sales exclusively through company organization
3. Maintenance and improvement of the firm's market position (percentage share of sales in major product markets)

Organizational consequences

These objectives led to the organizational establishment of

1. A quality control department
2. An extensive sales organization, with branches in different parts of the country

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[8] As reported in Dale, *op. cit.*, pp. 24–25.

3. Centralized market research, marketing budgets, and closely centralized control of results

Public relations objectives

Managerial co-workers shall do their share of worthwhile civic activities and strive to further the good name of the company in all walks of life. In the conduct of their personal lives they shall do nothing to bring censure or discredit to the company.

Organizational impact

This led to the establishment of a separate public relations function.

Production objectives

1. Emphasis on diversification; through diversity in products, seasonal peaks and valleys can be minimized and unfavorable changes in public acceptance of any one product hedged against.
2. In order to provide full employment, existing plant facilities shall be utilized fully and sub-contracting done systematically only when found advisable for reasons of capacity, economy, or lack of specialized machinery and know-how.

Organizational consequences

1. Division of production work into different product departments
2. Establishment of production and engineering control departments
3. Coordination of production and sales through a committee of the executives concerned

Planning for the ideal. The difficulty with much organizational planning is that it starts with people and builds around them, instead of beginning, as is proper and logical, with plans for the best possible organization to accomplish enterprise objectives and then making necessary modifications for the human factor. Organizations must obviously operate with people. But an organization built around available personnel, with the shortcomings and lack of suitability of some members, can hardly reflect scientific grouping of activities and logical allocations of authority. Moreover, such an organization plan tends to perpetuate the problems raised by personalities, even after individuals have dissociated themselves from the enterprise. An organization planned in this way tends, finally, to lose its long-run planning objectives.

Essential to organization planning, then, is the search for an ideal form of organization to reflect the basic goals of the enterprise. This entails not only charting the main lines of organization and reflecting the organizational philosophy of the enterprise leaders (*e.g.*, shall authority be as centralized as possible, or should the company try to break its operations down into semiautonomous product or territorial divisions?), but also a sketching out of authority relationships throughout the structure. This ultimate form of organization, like all planning procedures, is seldom designed to remain unchanged, and continuous remolding of the ideal plan will normally be necessary. Nevertheless, a plan constitutes a kind of standard, and, by comparing present organization with it, those who control an enterprise can know what organizational changes should be made when the opportunity for doing so is presented.

In planning for the ideal, it is necessary for those who would do a good job of planning to keep abreast of the best thought and practice in the country, continually to question and test the soundness and adequacy of every phase of the organization plan from an objective point of view, and to design the specifications for each level of management and for each key job. To these important aspects of planning should be added the need for continually reexamining the philosophical basis for organization. There is a danger that decentralization of authority may become such a fetish as to cause top managers to overlook the importance of centralization of certain policies and controls. Or there may be the danger that a limited number of subordinates will be accepted as a necessary requirement of the span of management, while the inefficiencies generated by too many levels are overlooked.

The organizer must ever be careful that popular notions in organization do not blind him to their disadvantages and that what may work so well in one company may not work in another. Principles of organization have general application, but care must always be taken that the factual background of an individual company's operations and needs must be the fundamental guide in the application of these principles. Organization has a peculiar need for being tailor-made.

Modification for the human element. Despite objective application of principles and the formulation of ultimate organization plans without regard to persons available for staffing it, the organization must, of course, be modified for the human element. Organizations must live. As such, they must necessarily take people into account. If these persons do not fit the most practicable type of organization and if they cannot or should not be sidetracked, there is no alternative but to modify the organization to fit their capabilities, attitudes, or limitations. While this may smack of organizing around people, it is actually organizing first around the total managerial job to be done, with later modification for the personal factor. Departures from sound organization can thus be kept to the minimum, and planning will be available to eliminate compromises with principle whenever changes in personnel occur. An organization plan built in such a way has a better chance of meeting changes in environmental factors so necessary to continuity.

Advantages of organization planning. While the basic advantage of organization planning, like that of all aspects of business planning, is improvement of management through orderly coordination of human endeavor in the face of social, biological, and technical change, there are a number of important special advantages. Good organization can go far to make up for deficiencies in leadership by furnishing the structure through which available abilities can be effectively harnessed. Such a structure, furthermore, increases managerial efficiency. Far too much executive time is consumed by group meetings to determine who has the authority to do what, or how this program or that policy is to be implemented. Moreover, the manager whose subordinates do not understand the nature of their functions, responsibilities, or authority is placed under an unnecessarily heavy burden.

Planning the organization structure is also a requirement for determining personnel needs in the future and in developing training programs to meet them. Without a planned organization, an enterprise can hardly know what managerial personnel will be needed and what their qualities of experience should be. Thus, it cannot intelligently recruit and train men.

Furthermore, organization planning can be an important tool for disclosing organization inadequacies and weaknesses. Duplication of effort, fuzziness of lines of authority, too long lines of communication, too much red tape, and obsolete practices can be better disclosed through comparing desirable organization with actual organization than in any other way.

Avoiding Organizational Inflexibility

One of the advantages of organization planning is the avoidance of organizational inflexibility. Too many firms, especially those which have been in business for many years, develop a rigidity that hampers their ability to meet the first test of effective organization—adaptation to changing business environment.

The signs of inflexibility. One has only to look at some of the older companies in business to see ample evidence of these inflexibilities: an unchanged organization pattern no longer suitable for the changing times, a district or regional organization that could be abolished or enlarged because of improved communications, or a too highly centralized organization for a vastly enlarged enterprise requiring extensive decentralization. Some of the railroads continue to be organized in divisions originally determined by the daily mileage of a steam locomotive. Some of the defense plants of World War II found their scope of operations reduced after the war by as much as 90 per cent; yet their organization held fast to the procedures of their war-swollen industrial empires. The Ford Motor Company, under the late Henry Ford, Sr., lost much of its efficiency and markets before a new management under the founder's grandson dispersed the centralized authority demanded by the elder Ford. These and countless examples of organizational inflexibility could be pointed out. But they spell one symptom—the inability or reluctance of managers to change organization to reflect social and technical dynamics.

The reasons for reorganization. While the basic reason for reorganization is ordinarily the need for the firm to meet changes in the business environment, there may be other compelling reasons. Those related to the business environment include changes in a company's operations caused by acquisition or sale of major properties, changes in the product line, marketing methods, business cycles, competitive influences, new producing techniques, labor-union policy, or government regulatory and fiscal policy. In addition, an important environmental factor is the state of the art and science of organization. New techniques and principles may be applicable, such as the realization that managers are best developed by being allowed to manage decentralized semiautonomous units of a company, or such as new methods to gain adequate financial control while allowing a high degree of decentralization.

When a new chief executive officer comes into the top management of a company, moreover, he is likely to have some definite organizational ideas of his own. New vice-presidents and new department heads tend to feel the same way. These shifts may come merely from the desire of new leaders to make changes, from ideas formulated through their previous experience, or from the fact that their methods of managing and their personalities require a modified organization.

Furthermore, reorganization often results from demonstrated deficiencies in an existing structure. Some of these arise from organizational weaknesses themselves, such as excessive spans of management, too many levels, inadequate communication, poor interdepartmental coordination, excessive numbers of committees, lack of uniformity in policy making, slowness in decision making, or failure of organization to accomplish objectives, as evidenced by inability to meet delivery schedules, excessive costs, or breakdown of effective financial control. Other deficiencies may stem from inadequacies of the manager. Staff-line conflicts may develop to such an extent that they can be resolved only by reorganization. Lack of knowledge or skill by a manager, who for some reason cannot be replaced, may be avoided by the expedient of organizing so as to move much of the authority for decision making to another place. Personality clashes between managers also may be solved by reorganization.

The need for reorganization. In addition to meeting the impelling reasons for reorganization, there is a certain need for moderate and continuing reorganization merely to keep the structure from developing inertia. Some enterprise leaders, realizing that an organization must be a living institution, purposely make organizational changes to keep their subordinates accustomed to change.

Much can be said for developing this kind of tradition. People used to seeing change tend to accept needed modification without the frustration and demoralization that result when reorganization reaches the stage at which it must be revolutionary. On the other hand, too much organizational change strikes at the core of those factors motivating human conduct, such as status and security. A company continually undertaking major reorganization may so damage the morale of its managerial group and their subordinates as to harm the enterprise, cause loss of key personnel, and lose efficiency.

Somewhere between these extremes is a desirable degree of change. Organization change should be encouraged so long as morale and efficiency are not harmed but helped. The degree of this will depend upon the quality of leadership in the organization and the extent people believe in it; the effectiveness of communication, since people fear change whenever they do not understand it or its probable effect upon them; and the soundness of the organizational revision. Business managers tend to underestimate the ability of subordinates to accept a reorganization that makes sense in the light of business facts and enterprise objectives. When morale is damaged by reorganization, the fault may be ascribed to a lack of facts and understanding as to the need for the reorganization, an ill-conceived organization plan, or a staff of poorly qualified executives.

Informal Organizations

If formal organization is to be made to work effectively, it must recognize, utilize, and be consistent with informal organization. Since organization is a social tool for the conscious coordination of the activities of people toward a desired goal, it must be operated within the framework of those patterns of social behavior that characterize any group.

The nature of informal organizations. Although social psychologists have recognized the importance of informal organizations in group behavior, perhaps the clearest analysis of them and their relation to formal organization has been that made by Chester I. Barnard.[9] He refers to an organization as formal when the activities of two or more persons are *consciously* coordinated toward a given objective, while organization is informal when the aggregate of interpersonal relationships are without conscious joint purpose, even though common or joint results may come from them. Thus, Barnard's concept of informal organization is similar to the sociologist's concept of folkways (customs of the group), mores (folkways whose observance is regarded as so important by the group that some sanction is applied to gain enforcement), and institutions (a complex of folkways, mores, and other group patterns of behavior designed to gain a group objective).

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[9] C. I. Barnard, *The Functions of the Executive* (Cambridge, Mass.: Harvard University Press, 1938), Chap. 9.

All manner of patterns of group behavior fall within the sphere of informal organizations. Language and other communications devices, the "grapevine," the Friday-night poker group, the regular morning-coffee crowd, and many other patterns of group behavior are examples of informal organization.

Interrelationship of formal and informal organization. As Barnard appropriately points out, informal association necessarily precedes formal organization. Before structure and conscious purpose can be given to group behavior, there must be communication, association, and a concrete object of action. People seek associations and the satisfactions that arise from them. This gregarious impulse and rational association to accomplish goals that an individual alone cannot gain form the basis for formal organization. When the group is associated and coordinated, with a conscious joint purpose and a formalized structure to gain this purpose, it then becomes a formal organization.

Formal organizations, as Barnard so aptly perceives, create additional informal organizations. The interrelationships of authority that cannot be charted, the unwritten rules of organizational conduct, the necessity for "learning the ropes," and the patterns of behavior that develop in any organization are evidences of informal relationships derived in this way. Moreover, by its very nature an organization creates many small groupings or associations which are not on the chart but which grow from departmentation—the machine-shop group, the production-engineering group, the sixth-floor group, the Friday-evening bowling gang.

The grapevine. One of the most interesting and significant informal relationships almost invariably found in any formal organization is referred to as the "grapevine." This relationship is generally quite structureless but is made up of the members of the formal organization who know each other well enough to pass on information concerning the enterprise itself. In the typical business enterprise, where its members spend many hours a day and from which both material security and status are obtained, the desire for information concerning the company furnishes the social motivation for a rapid transmittal of this information between persons who know and trust each other.

The grapevine, of course, thrives on information that is not openly available to the entire group, either because it is regarded as confidential, because the more formal lines of communication are inadequate to disperse it, or because the information is of the kind (*e.g.*, scandal) that would not ever be given full, formal disclosure. Even a management that goes to extremes to inform employees through company bulletins or newspapers can never so completely or expeditiously disclose all information of interest to members of the organization as to make the grapevine purposeless.

Some business executives worry unduly about the grapevine. The authors recall one company president who did his utmost to destroy the grapevine of his company and fretted constantly over his inability to do so. Despite his best efforts to get information completely, clearly, and quickly to his employees, the grapevine continued to thrive. He should not have expected it to do otherwise.

Since all informal organizations serve an essential function in human conduct—that of communication—the grapevine is an inevitable, and valuable, component of the business organization. Indeed, the intelligent top manager would probably be wise to feed it. Experience has shown it to be one of the most effective devices for quick communication, and, consequently, managers would do well to nurture it with accurate information. There is much to be said for the manager's increasing his effectiveness by gaining a place, personally or through a trusted staff member or friend, on the company grapevine.

Using informal organizations to make formal organization work. The existence of the grapevine emphasizes the need for using informal organizations to make formal organization work. They are important channels of communication; moreover, as Barnard has emphasized, they bring cohesiveness to formal organization. Finally, they bring to the members of a formal organization a feeling of belonging, of status, of self-respect, and of gregarious satisfaction. Barnard observes in this connection that these informal organizations are not destructive of the formal but are rather an important "means of maintaining the personality of the individual against certain effects of formal organizations which tend to disintegrate personality." [10]

Since informal organizations are essential to individual satisfaction and to the formal organization, managements should pay greater attention to them, recognizing, nurturing, and utilizing them. Since man is a social animal, and organization a social institution, recognition of the components of group behavior and their patterns and motivations is a requisite to successful operation of any social endeavor. The most effective business managers, understanding this fact, consciously use informal organizations as channels of communications and molders of employee morale.

SOME ORGANIZATIONAL DANGERS

While many mistakes are made in the formulation and operation of organizations, there are a few that are so common that they should be emphasized. Despite their obviousness, they continue to thwart the effectiveness of many an undertaking.

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[10] *Ibid.*, p. 122.

Careless application of the staff principle. There are many valid reasons for using the staff assistant or the staff specialist and even building entire departments with an advisory job to do. However, there is a danger that the staff assistant or specialist will be used to undermine the authority of managers charged with the administration of the function on which the staff is intended to advise. A manager in charge of a department, or a president responsible for managing a company, may assign a policy problem to his staff and then assume unconsciously that this action constitutes a decision, although none of the authority for planning has actually been delegated.

The undermining of managerial authority may extend to subordinate line managers. There is an ever-present danger that a top manager may surround himself with staff specialists and so preoccupy himself with their work as to exclude from his schedule the time and attention needed for his key line subordinates. A manager, too, may assign problems to his staff that should be more appropriately assigned, often with specially delegated authority, to his line lieutenants.

Another hazard of staff operation is the tendency of staff personnel to exercise line authority when that authority has not been delegated to them. It is easy to understand the impatience of a staff specialist who sees clearly how a situation should be handled and yet notices that the line officer charged with it seems to be dilatory or clumsy in his approach. The very quality that makes a staff specialist so valuable—specialized knowledge in a given field—also makes him impatient to command. Yet, if he were to exercise this authority over other parts of the organization, without a clear and definite delegation, he would be not only undermining the authority of the responsible line official but breaking down unity of command.

Unrestricted delegation of functional authority. Perhaps even more perilous to good management than the careless application of the staff principle are the dangers in unrestricted delegation of functional authority. This is especially hazardous, since the complexities of modern business create a number, and often a large number, of cases where it is desirable to give a predominantly staff or a service department functional authority over other portions of the organization.

In the quest for specialization and its economies and for the advantages of technically expert opinion, business often tends unduly to exalt staff and service departments, with consequent loss in prestige and effectiveness to the line departments. Many line officers, from the vice-president in charge of operations to the foreman, feel, with justice, that the business is being run for the staff and service departments. It must be readily admitted that the services of the specialist and the specialized department often are essential for business efficiency and may be made necessary by external influences bearing on the enterprise. But it should never be forgotten that these services are designed to assist and facilitate the principal activities of the business.

Dual subordination. The principal danger of too great proliferation of functional authority delegations is the breakdown of unity of command. One has only to look at the various departments at the top of the typical medium-sized or large business today to see how such a breakdown occurs. The controller is given power to prescribe accounting procedures throughout the company. The purchasing director is given authority to prescribe how and where all purchases are to be made. The personnel manager dictates to all supervision (usually because union contracts or government regulations prescribe them) how employees shall be classified for pay purposes, how vacations shall be scheduled, or how many hours are to be worked. The traffic manager may guide the routing of all freight. The general counsel may insist that all contracts of any kind bear his approval and be made in prescribed form. The public relations director may require that all public utterances of managers and employees be cleared through him or meet a prescribed policy line. And the tax director may be given the authority to review all policy decisions for clearance on their tax aspects.

Thus, with all these staff and service specialists having a small chunk of line authority over a part or all of the organization, and with their counterparts often being duplicated in the divisions and regions, the key line manager finds himself with many superiors. In addition to his principal superior, who usually has the final say on his pay scale and chances for promotion, the manager finds that he is subject to the direction of a number of staff departments with functional authority. And when these instances are multiplied in the regions and divisions and in the factory, it is no wonder many subordinate managers find themselves frustrated. One general foreman of a factory subdepartment informed the authors that he just did the best he could to satisfy everyone and that, when he did not have time and energy to satisfy all, he resorted to the "decibel" principle of management, satisfying only those who made the most noise.

It should not be assumed that dual subordination results only from delegations of functional authority. It also results from faulty organization and from instances of plural executives. Wherever found, dual subordination causes confusion, undermines the definiteness and effectiveness of authority, and threatens organizational stability.

Granting authority without exacting responsibility. One of the significant causes of mismanagement is the granting of authority without exacting responsibility. Authority delegation is not responsibility delegation; the delegant remains responsible for the proper exercise of authority by his subordinate. Any other relationship would lead to organizational anarchy. Moreover, anyone to whom authority is delegated must be willing to be held responsible for his actions. Too often the division or regional manager remembers the authority that has been delegated to him and forgets that headquarters officers have the right and obligation to hold him fully accountable for use of it.

Exacting responsibility without delegating authority. One of the most common complaints of subordinates in organization is the tendency, on the part of some superiors, to hold them responsible for a duty without giving them the authority to accomplish it. Some of these complaints are unjustified and are based upon the misunderstanding that few subordinates can have unlimited authority in an area of operations because their actions must be coordinated with those in other areas. Subordinates, thus, often see their jobs as all-encompassing in importance and forget that their authority delegation is limited to actions within their own departmental boundaries. But altogether too often the complaints are justified, and managers, sometimes without realizing it, do hold subordinates responsible for functions over which they have no power. This does not often happen where organization lines and duties have been clearly set forth, but where an unchartable organization exists and where relationships are not spelled out in enough detail, the obvious error of exacting responsibility without delegating authority can and does occur.

Failure to clarify relationships. Organizational inconsistencies can result from the failure to clarify authority relationships. This error, or deficiency, probably accounts more than any other for frictions in organization, for politics, mistakes, and inefficiencies. Since modern business is complicated and human relationships are difficult to define, it is not surprising that many firms hesitate in this respect. There are even business leaders who pride themselves on having a team of subordinates without specified authority lines. But the failure to clarify relationships places too great a burden on organization and personalities.

Failure to delegate authority. One of the common complaints in organizational life is the failure to delegate authority, that reluctance on the part of many managers to push decision making down into the organization. It must be admitted that in some small businesses, where uniformity of policy is necessary and where decision making can be handled by one or a few managers, there may be neither the need nor the desire to decentralize authority. But the bottlenecks of decision making, the excessive reference of small problems to upper echelons, the overburdening of top executives with detail, the practice of "fighting fires" and "meeting crises," and the underdevelopment of managerial experience in the lower levels of organization give evidence of the danger in failing to delegate authority.

Confusion of authority and informational relationships. The problems of levels of organization can be reduced by opening wide the channels of information. Information gathering should be separated from decision making, as only the latter requires managerial authority. There is a tendency in large organizations to force lines of information to follow authority lines, when the only reason for following a chain of command is to preserve the integrity of authority and the clearness of responsibility.

Unless information is confidential (and businesses, as well as other organizations, tend to overdo such a classification) or is unavailable except at exorbitant expense, there is no reason why lines of information should follow lines of authority. The company that makes a distinction between authority and informational relationships does much to avoid the costs of levels and departmentation, while at the same time preserving organizational integrity for decision making.

Principles for Sound Organization

While no one would claim that the science of organization has developed to the point where principles are infallible laws, it is surprising how much unanimity exists among management scholars as to the existence of a number of principles of organization. These principles are truths of general application, although the generality of their application is not so precise as to give them the exactness of the laws of pure science. They are more in the nature of criteria of good organization. They are, as Urwick has pointed out, "a beginning, if only a beginning, of a comprehensive philosophy of the task of administration, whether in business or elsewhere." [11]

In its survey of organization, published in 1952, the American Management Association found nine criteria used most frequently in the organizational process.[12] To a very great extent the criteria are the principles enunciated by various outstanding scholars of management, especially Barnard, Fayol, Taylor, Dennison, and Urwick. It is interesting that the principles developed by these scholars should be those most generally applied by well-managed American business firms. These criteria, as modified and supplemented, will be discussed in this section.[13]

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[11] L. Urwick, *The Need Is Urgent to Make Leadership a Reality* (Toronto: Manufacturing and Industrial Engineering, 1952), p. 34. This monograph is a series of six lectures given by Urwick at the University of Toronto in 1951.

[12] The results of this survey were published by Ernest Dale in his *Planning and Developing the Company Organization Structure*. The criteria of sound organization are found on pp. 138–144. The authors have drawn upon Dale's summaries in this section.

[13] For this material the authors also owe much to the clear and thoughtful analyses of L. Urwick, who visited the University of California at Los Angeles in the spring of 1953 as a special lecturer.

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Unity of objective. Perhaps the most basic of all principles of organization is that the organization as a whole and every part of it must contribute to the attainment of the enterprise objective.[14] Thus, it must be effective, as Barnard has emphasized, in furnishing individuals in an enterprise the organizational means for gaining its objective. And every division, branch, department, or section should be judged in the light of how well it contributes to the attainment of this objective.

As will be noted presently, the fact that an organization may be effective in gaining enterprise objectives, with every part contributing to this end, does not necessarily imply that it does so efficiently. One company, for example, which developed a large and expensive organization structure, so that each part contributed uniformly and effectively to the company's objective, found that it was done with considerable unnecessary cost.

The application of the principle of unity of objective implies, of course, the existence of a formulated and understood enterprise objective or objectives. If this objective is to make a profit over a long period of time, then the organization pattern that contributes to its accomplishment may be regarded as meeting the requirements of the principle of unity of objective. There may be other goals, or derivative objectives, but organization structure and action must be measured against the criterion of effectiveness in meeting them.

Efficiency. An organization is efficient if it meets its objectives (*i.e.* is effective) with the minimum unsought consequences, or costs. The concept of efficiency so used is employed in the sense of the ratio of output to input, although it goes beyond the usual sense of thinking of these costs entirely in such measurable items as dollars or man-hours. Even though financial or material unit costs are important in measuring organizational efficiency, the principle, as employed here, encompasses such matters as individual and group satisfactions and the contribution of the enterprise to the community. To an individual, an efficient organization is likely to be one that makes for work satisfaction and work effectiveness. It is thus an organization with clear-cut lines of authority, proper exaction of responsibility, reasonable participation in problem solving, encouragement of a feeling of security and status, provision for personal development, and necessary economic returns to satisfy needs and wants.

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[14] In his 1953 lectures Urwick referred to this principle as "the principle of objective," one of ten such principles of organization. See also his *Notes on the Theory of Organization* (New York: American Management Association, 1952), pp. 18 ff. Barnard, in his *Functions of the Executive,* refers on pp. 19 ff. to this principle as a matter of "effectiveness" of organization, making the point that an organization is effective, although not necessarily efficient, when it gains its objective.

The principle of efficiency must be applied with judicious balance. Too often, in establishing an organizational structure, managers see the cost reductions possible in setting up a service department, without ascertaining the complementary costs outside the department. For example, a central statistical department may be established and all activities dealing with statistics and their compilation assigned to it; but perhaps, while statistics will be produced at low cost, they will not be suitable to the needs of the manager who must use them. Also, one of the customary places for the inexperienced efficiency engineer to save money is in the establishment of secretarial pools. While these often work efficiently in terms of the enterprise as a whole, there are many occasions where secretarial work is done efficiently but at the cost of countless hours of executive time spent waiting for the assignment of a secretary or for needed stenographic work.

As Dale points out, efficiency tends to become a vague and variable criterion. The president of a company may impatiently drive toward cost, market, and profit goals by tactics that reduce the work satisfaction of subordinates in an organization. One manager may feel that the only standard of efficiency is profit, another may measure efficiency in terms of survival, another by business status, another by public service, and still another by growth and expansion.

But, however the standards of efficiency work out in practice, the principle of efficiency underlies the measurement of any organization. Difficulties are encountered in selecting the standard of efficiency appropriate to a given organization. Thus, one person may criticize the overlapping of activities in certain government departments, while another may feel that this overlapping is a necessary cost of gaining protection against the dangers inherent in concentrating too much power in the hands of a few. A president of a business may be criticized as being inefficient in pressing too slowly for organizational changes, when this slowness may be justified by the greater benefits of having a group of subordinates learn for themselves the advantages of such changes and therefore embrace them more completely and loyally.

Span of management. Departmentation is required by the operation of the principle of span of management, which recognizes that there is limitation to the number of persons an individual can effectively manage. This limit depends upon the many factors that have been discussed in detail above. This limit, or span, originally named by Urwick the "span of control," is the *raison d'être* of departmentation and hence of organization. If there were no such limit, clearly all that any enterprise would need is a single manager, since division of work (specialization) can be obtained without subdividing the managerial job.

Division of work. Division of work is the first of Fayol's fourteen principles of management.[15] It concerns what has been called the primary step in organization, the determination and establishment of "the smallest number of dissimilar functions into which the work of an institution may be divided." [16] As Fayol indicated, this is the principle of specialization; it is the "division of work to produce more and better work with the same effort." [17]

This principle might be referred to as that of organizational specialization. If the limitations of span of management make organization necessary, departments should then be established to reflect the most efficient breakdown of enterprise activities. And, to some extent, even though the enterprise is so small as not to require departmentation, the principle would still apply, as an extension of the classifying features of the scientific method to the accomplishment of enterprise objectives. The question this criterion raises, then, is: Does the organization structure so divide and group the activities of an enterprise that they contribute most efficiently and effectively to enterprise purpose?

Functional definition. Departmentation is the grouping of activities to make the organization effective and efficient *plus* the granting of authority to make possible the accomplishment of these activities and their coordination with the organization as a whole. This activity requires functional definition, the clear specification of duties and of authority relationships. It is the lack of such definition that causes so much confusion in organizations and so many difficulties in the accomplishment of enterprise goals.

The scalar principle. The scalar principle refers to the need for a chain of direct authority relationships from superior to subordinate throughout the organization. It is described by Fayol [18] as

> . . . the chain of superiors ranging from the ultimate authority to the lowest ranks. The line of authority is the route followed—via every link in the chain —by all communications which start from or go to the ultimate authority.

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[15] Henri Fayol, *General and Industrial Administration* (New York: Pitman Publishing Corporation, 1949), p. 20. It should be pointed out that the authors' fifteen principles of organization vary from those of Fayol. A number of them are essentially the same, such as Fayol's principles of division of work, authority and responsibility, unity of command, unity of direction, centralization (balance), and scalar chain. Other Fayol principles apply to managerial functions such as direction. Still other principles expressed by Fayol, such as equity, initiative, *esprit de corps,* seem to refer to problems of leadership or characteristics of planning, control, or direction and are not included in the authors' list.

[16] H. A. Hopf, *Organization, Executive Capacity, and Progress* (Ossining, N.Y.: Hopf Institute of Management, 1945), p. 4, in Dale, *op. cit.,* p. 141.

[17] Fayol, *op. cit.,* p. 20.

[18] *Ibid.,* p. 34.

This path is dictated both by the need for some transmission and by the principle of unity of command, but it is not always the swiftest. It is even at times disastrously lengthy in large concerns, notably in governmental ones.

A clear understanding and definition of the scalar principle in organization is necessary for proper functioning. Every subordinate must know who his superior is and to whom policy matters beyond his own authority must be referred for decision. While the chain of command may be safely departed from for purposes of information, departure for purposes of decision making tends to destroy authority and undermine managership itself.

The exception principle. Functional definition plus the scalar principle gives rise to operation of the exception principle. This principle implies that at some level in any organization a decision on policy can be made and that only exceptional matters should be referred upward to that point where adequate authority for the making of the decision exists. In other words, each manager at each level should make those decisions that he can in the light of his authority. Only those matters that he is incompetent to decide, because of authority limitations, should be referred to his superior.

Unity of command. One of the significant principles of management, implied in the scalar principle, is the requirement that each subordinate should have but one superior. Without such a requirement, there would be an ever-present danger of conflicting commands and the almost certain problem of exacting responsibility accurately and carefully. Thus, the subordinate is likely to be confused by such duplication, and the superior bewildered by not knowing what duties have been assigned, what authority delegated, and what responsibility to exact. A superior-subordinate relationship is an eminently personal thing, and it will almost certainly be rendered inefficient by dividing the authority to command.

Unity of direction. Fayol lists as his fifth principle that of unity of direction. He expresses it as the necessity for having one head and one plan for a group of activities having the same objective.[19] While unity of command refers to the interpersonal relationship of superior and subordinate, unity of direction has to do with program.

The implications of unity of direction are obvious. Without unity of direction various persons in the same department, while striving toward the same objectives, might follow different and inconsistent programs of action. Even though the implications are obvious and the penalties in efficiency are great, the lack of such unity is a commonplace in organization. Cases in which one department has no conception of how it meshes with another or in which one group in a department works under different policies and plans from another, while fortunately not general, still occur frequently.

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[19] *Ibid.*, pp. 25–26.

Responsibility. The responsibility of the subordinate to his superior is absolute, and no superior can escape responsibility for the activities of his subordinate. This consequence of authority relationships has been discussed thoroughly in connection with the analysis of authority made earlier.[20] Since responsibility cannot be delegated, it follows that every superior is responsible for the acts of those under his command, for *he* has delegated authority and assigned duties to his subordinates and must therefore be held responsible for their actions. Likewise, the subordinate, having once accepted an assignment of duties, is wholly responsible to his superior for the performance of them.

Parity of authority and responsibility. That authority and responsibility must be coextensive is almost a truism in organizational operation. One cannot accurately or fairly be held responsible for accomplishing duties if he does not have the power to do so. By the same token, if duties are assigned and necessary authority delegated, a person can hardly be held responsible for less. Thus, it is apparent that parity must exist between authority and responsibility.

Balance. In every organization, there is a need for balance. For example, there must be balance in centralizing and decentralizing authority. Many matters require adequate authority at the level of the foreman or the district manager, and this authority should be pushed down into the organization as far as necessary. Other matters, such as control over capital expenditures and the over-all level of operating expenses, must be centralized in the upper levels of management in order to preserve the solvency, continuity, and coordinated direction of the enterprise as a whole.

The inefficiencies of broad spans of management must be balanced against the inefficiencies of levels and long lines of communication. The losses from multiple command must be balanced against the gains from expertness and uniformity in applying functional authority to staff and service departments. The savings of occupational specialization in departmentizing according to enterprise function must be balanced against the advantages of shorter lines of command and communication and of management development obtained by establishing semiautonomous product or territorial departments.

Furthermore, the requirements of balance extend to departments and managers at each level. Authority allocations must be so balanced and coordinated that each department can most effectively cooperate with its counterparts and associates. Thus, in a factory, it would be fatal to proper coordination to give the parts manufacturing department complete authority over its job and to give little authority to the subassembly or final assembly departments.

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[20] See Chap. 4.

Flexibility. As was pointed out earlier, one of the serious drawbacks to organizations is their tendency to develop inflexibilities. Resistance to change, complicated procedures or red tape, or too complex and detailed a system of control to avoid mistakes are examples of inflexibility and are steps toward failure, since, without flexibility, the organization will be unable to meet the challenge of business, technical, biological, and social change.

Continuity. One of the obligations of management, and one of the tasks organization is designed to perform, is the perpetuation of the enterprise. Unless objectives are changed as modification in underlying environmental factors require, the enterprise will wither and eventually fail. But, assuming that objectives are altered to meet change, the organization itself must provide means for effecting continuity.

Organizations accomplish this purpose in many ways. One is to provide flexibility in organizational arrangements; another, to provide a ladder of positions, with increasing scope, so as to make available logical and practicable training steps. Even the best management-development program cannot operate well unless opportunity is given for managerial candidates to gain experience in positions of increasing diversity and responsibility. Still another means of achieving continuity is that of continual reexamination of the suitability and need for activities and their groupings.

Leadership facilitation. Since managership depends upon the quality of leadership of those in managerial positions, it is important that the organization structure do its part in creating a situation in which the manager can most effectively lead. In this sense, organization is a technique of leadership. If the authority allocation and the structural arrangements create a situation in which the head of a department tends to be looked upon as the leader and in which his task of leadership is facilitated, organization has accomplished an essential task. But if the department head is buried in detail or if the actual authority for planning, direction, staffing, or control is placed in a staff or other subordinate, the organization has overshadowed and thwarted its managers.

It is no accident that organizations are usually charted in pyramid form. The pyramid itself implies a situation in which the head of the pyramid and of each subordinate pyramidal part is the leader of a group. But it is necessary that there be more support for the leadership situation than the ability to chart a pyramid. The authority delegations and relationships must be such that the structure of organization actively supports the leadership position of the manager.

SELECTED REFERENCES

Bakke, E. W., *Bonds of Organization*, Chaps. 4, 6, 7. New York: Harper & Brothers, 1950.

Barnard, C. I., *The Functions of the Executive*, Chaps. 5–9. Cambridge, Mass.: Harvard University Press, 1938.

Brown, A., *Organization of Industry*, pp. 1–26. New York: Prentice-Hall, Inc., 1947.

Dale, E., *Planning and Developing the Company Organization Structure*, Research Report 20, pp. 123–171. New York: American Management Association, 1952.

Davis, R. C., *The Fundamentals of Top Management*, Chap. 14. New York: Harper & Brothers, 1951.

Fayol, H., *General and Industrial Management*, Chaps. 4–5. New York: Pitman Publishing Corporation, 1949.

Hall, G. L., *The Management Guide*. San Francisco: Standard Oil Company of California, 1948.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control*, Part B. New York: McGraw-Hill Book Company, Inc., 1951.

Jamison, C. L., *Business Policy*, Chap. 17. New York: Prentice-Hall, Inc., 1953.

Mooney, J. D., *Principles of Organization*, rev. ed., Chaps. 1–5. New York: Harper & Brothers, 1947.

Redfield, C. E., *Communication in Management*. Chicago: University of Chicago Press, 1953.

Urwick, L., *The Elements of Administration*, Chaps. 1, 4, 5. New York: Harper & Brothers, 1943.

———, *The Need Is Urgent to Make Leadership a Reality*. Toronto: Manufacturing and Industrial Engineering, 1952.

———, *Notes on the Theory of Organization*. New York: American Management Association, 1952.

PART THREE

STAFFING

15

THE MANAGERIAL JOB

Staffing is the executive function that encompasses the recruiting, selection, training, promotion and retirement of managers. The personnel who are included range from president to foremen—from those who occupy exalted positions to those who are needed for the humblest supervisory job.

The view that staffing *is* a managerial function is a relatively recent one.[1] Most writers merely assume that managers exist in the enterprise.[2] A few authors have been driven by the researches of psychologists and sociologists and by the concern of businessmen to give attention to the selection and training of subordinate managers[3] without considering whether such activities comprise an executive function.

Changes in the environmental conditions in which the managers of enterprise must operate are among the causes for the growing realization that staffing is equally as important as any other executive function.

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[1] Among the writers who have adopted this view are F. C. Hooper, *Management Survey* (London: Sir Isaac Pitman & Sons, Ltd., 1948); M. J. Dooher and V. Marquis (eds.), *The Development of Executive Talent* (New York: American Management Association, 1952); and J. W. Riegel, *Executive Development* (Ann Arbor, Mich.: University of Michigan Press, 1952).

[2] In this group should be included H. S. Dennison, *Organization Engineering* (New York: McGraw-Hill Book Company, Inc., 1931); J. R. Beishline, *Military Management for National Defense* (New York: Prentice-Hall, Inc., 1950); R. C. Davis, *The Fundamentals of Top Management* (New York: Harper & Brothers, 1952); R. T. Livingston, *The Engineering of Organization and Management* (New York: McGraw-Hill Book Company, Inc., 1949); J. O. McKinsey, *Business Administration* (Cincinnati: South-Western Publishing Company, 1924); L. Gulick and L. Urwick (eds.), *Papers on the Science of Administration* (New York: Institute of Public Administration, 1937); J. D. Mooney, *The Principles of Organization* (rev. ed.; New York: Harper & Brothers, 1939); M. C. Niles, *Middle Management* (New York: Harper & Brothers, 1941); and E. Petersen and E. G. Plowman, *Business Organization and Management* (rev. ed.; Homewood, Ill.: Richard D. Irwin, Inc., 1949).

[3] Attention is given to training by C. I. Barnard, *Organization and Management* (Cambridge, Mass.: Harvard University Press, 1949); M. T. Copeland and A. R. Towl, *The Board of Directors and Business Management* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1947); M. L. Mace, *The Growth and Development of Executives* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1950); and H. A. Simon *et al., Public Administration* (New York: Alfred A. Knopf, 1950).

Growth in size, in strength of competition, in trends toward big government and big unions, and in communication are basic factors in the demand for able executives. There are no types of enterprises that can longer afford to take chances on the random availability of needed managerial skill. In terms of the time spent and the skills developed in the discovery and training of managers, there is little question of the fundamental importance of staffing. William B. Given, Jr., president of the American Brake Shoe Company,[4] has said, "The future of any business depends more on the people in it than on any other single element."

The Responsibility for Staffing

It is as much the duty of a manager to look to the development of his successor as it is to organize the firm or department, direct his subordinates, formulate the plans and programs that are best designed to realize the goal of the group, and establish controls to reflect the degree to which plans are working out. If competent managers are not available as needed, there is a strong presumption that the firm will decay and dissolve. The attention the executive gives to the development of managers is in a very real sense a present cost of providing for the future welfare of the enterprise.

Some approaches to the problems of staffing are reflected in the practice of assigning to the personnel department the responsibility for this activity. This solution is attractive to those executives who wish to dump an ill-understood function in the lap of some subordinate. But a careful study of the issues involved would point to the fact that neither the personnel department nor any other grouped activity is the proper place for this function. The development of future executives, for one thing, cannot be routinized. There is a need for direction from top policy makers. And decisions relating to the identity of persons to be developed are so far-reaching, and are tinged with so much judgment, that few people would trust any one individual to make them.

Neither is it satisfactory to place upon each executive the burden of recruiting, selecting, and training a suitable successor. Individual managers do not have the time, facilities, or knowledge to discharge this function efficiently. The requirement that no supervisor can be promoted until there is a qualified successor available can be used to secure the cooperation of the several managers in any over-all staffing program. But it should be employed merely as a pressure device, not as a way to solve the staffing problem.

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[4] "Experience in the Development of Executive Leadership," in Marvin Bower (ed.), *Development of Executive Leadership* (Cambridge, Mass.: Harvard University Press, 1951), p. 75.

The ultimate responsibility for the recruiting, selection, training, promotion, and retirement of managers rests upon the chief executive officer and those of his immediate subordinates who compose the internal policy-making group of executives. They have the duty of developing policy, assigning the mechanical execution of it to some subordinate, and making certain that the program is being properly carried out. In the area of policy making they must consider such problems as how to develop a formal staffing program, whether to promote from within or secure managers from without, where to seek candidates, which selection procedures to follow, whether the training should be formalized, and what promotion and retirement procedures should be followed. Once policies have been settled, mechanical features relevant to putting the program into effect may be assigned to any department head. Normally the personnel director is selected because he has the facilities and has specialized knowledge of the procedures that are entailed.

The need for top-level follow-up is as essential in carrying out the staffing program as it is in the case of other types of plans. Numerous types of resistance will be encountered in any firm. Many managers will resent the loss of promising subordinates who are routed, for the sake of broadening experience, to other departments; staffing may not appear pressing at any moment of time; and there may be a certain amount of change in the routines. The prestige of top officials is therefore necessary to make certain that the program is being carried out according to plan.

A further and overriding reason for placing the ultimate responsibility on the shoulders of the chief general officer is that staffing is a function that is carried out with an eye to the future of the enterprise. The board of directors may properly look to the president to make certain that the future of the business will be safe in the hands of able managers. Although directors are responsible to the stockholders for the future as well as the present welfare of the enterprise, they cannot directly undertake the staffing function, beyond the appointment of a president, but must delegate this duty to him.

The Shortage of Managerial Manpower

Enterprise managers are becoming more and more aware that potential executive personnel are extremely scarce. Evidence of this awareness may be seen in current literature on this subject and in the intensive efforts of firms to discover and develop candidates. The reasons for this situation are both complex and far-reaching.

Modern industry and the managerial problem. The growth in size of the modern business enterprise has definitely increased the demand for persons with managerial skill. The large-scale enterprise is in a position quite different from that of the small-scale firm in so far as the work of employed personnel is concerned. Small institutions and many medium-sized ones cannot fully enjoy the economic advantages of the division of labor between manager and nonmanager. But large enterprises can profit from this type of specialization. The roles of foremen, front-line supervisors, office managers, and the numerous group of department heads, as well as the general officers, are filled with people who engage primarily in carrying out managerial functions. Consequently, a clear-cut demand for specialized executives is felt in all large-scale enterprises.

There is a second reason why the growth in the number and size of enterprises has tended to underscore the scarcity of good managers. This is the risk in decision making. The decisions made by numerous firms have a profound impact on the owners, the employees, the community, and the government. In order to make certain that the impact will contribute to the social welfare rather than injure it, one must employ able managers. The risk society would bear in employing mediocre executives to wield immense power is insuperable.

Tardy recognition of the problem. Tardy recognition of the staffing function is evidenced by the tentative steps that business managers have taken to develop suitable candidates and by the uncertainty that has characterized formal programs. Part of this attitude can be explained by the relatively recent growth of large enterprises. There have been, of course, a few enterprises with a long history—armies and navies, the Catholic Church, and governments, for example. The chief difficulty has been the failure to see the common applications of the managerial functions in these enterprises and in business.[5]

Another force delaying attention to staffing has been the slow understanding of what a manager does. So long as it was believed that a manager just "managed" and that whatever this entailed was indistinguishable from the exercise of technical skills, there was very little chance that the importance of the staffing function would be realized. Before any of the functions of executives could be studied with profit, it has been necessary to identify them, define them, and understand their relationship to the issue of achieving enterprise objectives.

A third, and equally important, reason for the tardy recognition of the staffing function is the discovery that the qualifications of executives are, in part, psychological in nature and that success in staffing depends, therefore, upon the development of ways of measuring such factors as intelligence, personality, leadership potential, and judgment. Psychologists have thus far been unable to help much in these areas, and there is, consequently, an understandable hesitancy on the part of business managers to proceed with assurance in the selection of potential candidates.

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[5] The chief contribution to the understanding of the commonality of the executive functions in diverse types of enterprises was made by J. D. Mooney and A. C. Reilley in *Onward Industry* (New York: Harper & Brothers, 1939).

The lack of managerial teaching. The lack of managerial teaching in educational institutions was deplored by Henri Fayol as early as 1916,[6] but little or no attention was paid to his views at that time. Indeed, despite the development of business schools, there have been few academicians interested in the subject until recent years. Such inattention may be largely responsible for the highly developed educational activities of the American Management Association, an organization whose membership is predominantly drawn from business executives.

The inadequacy of university teaching in the area of management theory stems from two factors. One is that skilled teachers in this area need to be mature men who have a combination of academic training and business or other enterprise experience. Unfortunately, there are few who see this need early enough to make the best use of their opportunities. To some extent businessmen are trying to remedy this fault through internships for university professors, lasting from a week or two to three months. Such firms as Boeing, Swift, and du Pont are pioneers in this movement.

A second reason for the lack of managerial teaching concerns the matter of what can be taught. Clearly, the universities cannot teach anyone how to manage in the same sense that they teach one how to conduct chemical research, keep books, and make engineering calculations. The manager must work *through* people, and the ability of the potential manager to do this cannot be discerned without on-the-job experience. However, there is one thing that can be done by the universities. This is to transmit to the student an understanding of what the managerial functions are and provide him with a background of knowledge and skill in the application of scientific methodology. From this point on, it is largely the responsibility of the employer to give managerial candidates an opportunity to learn through experience.

Uncertainties in the attitude of businessmen. Further causes for the shortage of executive manpower may be found in the uncertainties that plague businessmen. Many executives hesitate to do anything about the development of managers because they are not sure just what a manager should do. Many are uncertain, too, about their future needs for managers. Here the question is really one of how farsighted an executive should be. Those who are concerned with immediate and near-term problems of an enterprise are often inclined to delay attention to the flow of future managers. And, for firms which find the expense of training able managers high, delays are understandably not uncommon.

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[6] Henri Fayol, *General and Industrial Management* (New York: Pitman Publishing Corporation, 1949), p. v.

Executives have been slow to realize their personal responsibility for the development of future managers. There are few firms that delegate to their officers the specific duty of training executives. This duty is, of course, clearly implied. But it is easily neglected by men who are not aware of the vital role of the manager, who shy away from the expense of development, especially when candidates are free to leave the enterprise after their training, and who themselves were brought up by older men with a belief in trusting to chance and experience or to their ability to hire executives when needed.

Finally, many businessmen contribute to the shortage of future managers through their uncertainty about the proper training methods to use. Such executives may be conscientious about the need for managers and their own responsibility for developing them but, because principles of training are yet unsettled, remain uncertain about the best way for doing so. Universities, business consultants, business associations, and individual business firms are all experimenting in this area. Understanding this situation, the cautious businessman will go slowly in adopting a formal program.

Specifications of the Managerial Job

It is probably a truism to state that success in staffing rests firmly upon a clear understanding of what the enterprise expects of the individual manager. This expectation is the target that is kept in view when plans are formulated to provide the firm with able future executives. As was pointed out in Chapter 3, the essential nature of the managerial job does not vary with the type of enterprise, nor does it vary with the organizational level within the firm.

Influence of enterprise objectives and policies. The quality of executive personnel needed in the enterprise is vitally affected by the purpose and policies to be followed. The managerial job is complex, even in small business firms. No way has ever been found to place an enterprise in a laboratory. The engineer, the physicist, and the chemist are aided enormously in their quest to discover the nature of a force or an element by the facility with which they can control the test environment. The scientist is able to exclude the influence of factors not currently being studied, either by creating a situation in which they cannot intrude or by permitting them to exert an unvarying influence. The businessman is not so fortunate. His decisions must not only take into consideration such forces as the stage and trend of the business cycle, the political, economic, and social policies of government in its national and international phases, trends in the markets, and his immediate and future competitive situation, but also evaluate all these forces simultaneously. For him there is no such easy assumption as "other things being equal" or "other factors remaining constant."

The quality of executives is also affected by the social responsibility of the enterprise. It is a premise of untold importance that no firm will be permitted to exist in the long run unless it contributes positively to the general welfare. For after all, it is the preponderant majority of the people of a society who determine what and by whom activities shall be cultivated and what activities shall be stamped out. Private enterprise contributes its full share to the general welfare by efficiently providing goods and services to improve the standard of living, by adopting approved employee-relation practices, and by facilitating the purposes of the community. It is quite essential that the business manager understand the nature of these responsibilities and their harmony with profit seeking, so that he can develop and carry out policies that will achieve these complex objectives.

Relation of the organization structure to staffing. The number of managers needed in an enterprise depends upon its size, the complexity of the organization structure, its plans for expansion, and the number of changes in managerial personnel. Large-scale enterprises naturally have more managerial positions than do small-scale firms. However, the ratio between the number of managers and the number of employees does not obey any law of proportion. It is possible, by enlarging or contracting the span of management, to modify organization structures so that the number of managers in a given enterprise will decrease or increase.

The number of managers needed in an enterprise is also affected by the rate of turnover in the individuals who occupy managerial positions. The actual number of annual appointments to executive positions can be readily determined by a review of past experience. An analysis of the factors involved will reveal the relative importance of retirement for age and vacancies created by ill-health, demotions and separations, the national defense effort, and the steady demand of other enterprises for able young subordinates whom the firm has trained but is unable to hold.

Managerial positions are not standardized. Although there is a managerial job to be done, there is no standardized managerial position.[7] The confusion between these concepts is traceable to variations in delegated duties and to semantic difficulties. The common usage of such terms as sales manager, personnel director, and president, in oral and written communication, implies that the positions occupied by people with these titles are standardized. Yet nothing could be farther from the truth. It is possible for a person carrying the title of president to devote his time entirely to engineering, for a president to grant a title to a subordinate but assign to him few, if any, duties implied in the title, or for him to create a responsible position without a title.

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[7] Mace, *op. cit.*, pp. 20 ff.

Position titles, besides being misleading, may actually reveal nothing. The organization structures of department stores provide several examples of these two difficulties. One store may have a position with the title of sales manager. There is no way of determining from the organization chart just what this title implies. This position is not comparable to the commonly accepted position title of merchandise manager, because the product-line merchandise managers report to the president of the firm. Again, four other stores may employ four different position titles for the manager who is in charge of publicity, display, and advertising. They use the terms, publicity manager, advertising manager, manager of sales and publicity, and publicity director.

It is clear that the nature of a position can be learned only from the job description that should accompany all organization charts. For the purposes of staffing, it is important to know just what duties have been assigned to the individual who is to occupy a particular position. While his job, like all managerial jobs, entails the performance of the executive functions, it needs to be filled by a person who has the specific knowledge and experience deemed necessary for success. Only a position description will provide the necessary information.

The key factor of leadership. The specifications of the managerial job call for leadership of a high order. The business executive is quite helpless unless he can persuade his subordinates to carry out efficiently the operational steps essential to achieving the enterprise purpose. The manager can plan what others are to do, he can group subordinates effectively, he can staff managerial positions, he can supervise and guide subordinates, and he can measure results in order to determine how his plans are working out. But nothing will be done unless his subordinates work as a team, efficiently and with zeal, to perform the essential separate activities. The manager must motivate them in order to acquire their willing cooperation, must, in other words, show them that through cooperation they will be able best to achieve their personal objectives. Thus, leadership molds individuals into a team, makes possible the maximum satisfaction of every employee's objectives, safeguards and improves the owners' investment, raises the living standards in the community, and creates the environment for the flowering of initiative, innovation, discovery, and technique.

Qualifications Required of Managers

In view of the nature of the managerial job, what specifications are called for? This question has intrigued both businessmen and scholars for several decades. One of the methods used to discover the essential qualities of managers has been inductive. In this procedure, a number of executives have been analyzed with the purpose of determining whether they possessed any common qualities. Among the difficulties which were encountered were those of terminology, inability of various investigators to identify the same quality, and inability to measure the degree in which any quality was essential to managerial success. The only conclusion that could be safely drawn from these investigations was that managers are different!

This result, however, is very important, for it leads to the view that there is no executive type. Managers differ as much from one another as they do from nonmanagers. The interweaving of personal characteristics and variations in environment is enormously complex. Of course, complexity alone is not a sufficient answer to the difficulties of measurement, but it does present problems in the development of objective standards.

Those who must select potential managers would be able to operate efficiently if they knew (1) what qualities were required; (2) in what degree each was essential; (3) what combinations of qualities were acceptable, and in what degree; and (4) how to identify these qualities in candidates. The inductive approach to these issues has, as yet, been barren, and it is possible that such an approach is impractical in view of the nature of the manager's job.

Deductive approach to the qualifications of managers. Another way to approach the subject of executive qualifications has been to *deduce from the nature of the managerial job* those factors that should logically facilitate the successful undertaking of executive functions. This procedure is not merely traitism in camouflage. Rather, it is comprised of three steps: (1) knowledge of the managerial job; (2) deduction of the qualifications for managership; and (3) identification of these qualities in candidates for managerial positions. Although semantic difficulties tend to blur the distinction, there is a basic difference between lists of observed characteristics of men presumed to be successful managers and the qualifications required to perform the managerial job. The first describes men in given positions; the second proceeds from job analysis.

There are two qualities, considered by some to be largely innate, that can contribute in extraordinary degree to managerial success. One is high intelligence, the ability to comprehend complex interrelationships of forces and, on the basis of this evaluation, propose and guide action toward a given goal. The businessman operates in an environment in which everything affects everything else. Values cannot be placed on given forces, because their impact changes. This is the reason that an executive cannot hold everything else constant and vary one independent force in order to determine its value. Chester I. Barnard describes the need for high intelligence in these words: "To understand the formal aspects of a complex organization; to analyze formal relationships between organizations; to deal appropriately with combinations of technological, economic, financial, social, and legal elements; and to explain them to others so manifestly call for ability in making accurate distinctions, in classifications, in logical reasoning and analysis, that the point requires no argument."[8]

The second quality business managers must possess is leadership ability. Most enterprises are associative activities, that is, activities that combine material factors with people. It is the latter who need to be persuaded to contribute their best efforts toward the achievement of an enterprise objective they know, understand, and believe in. The person able to do this is a leader. The interrelationship between the group, the leader, and the objective of the activity in which all are engaged is one of continuing interdependency. The leader is permitted first place among his followers if the latter see in him the best opportunity to achieve their personal objectives; the leader needs the cooperation of his followers in order to realize his own personal objectives; and the societal objective can be achieved only by the concert of activities of leader and followers. Thus, the ideal relationship between this trinity is one of complete harmony.

It is clearly evident that there are additional qualities that have an important bearing on the success of managers. Among these are facility in communication, the habit of the scientific approach to problems, possession of broad cultural interests, the practice of the moral virtues, and the quality of good judgment. This is a formidable list. But each quality can be developed by intelligent men, and each has a positive contribution to make to managerial success.

Ability to Communicate. People cannot live in association, let alone work, without the facility to communicate with others. Within enterprises the ability to transfer ideas and information has top priority. People need to learn about their environment, their relationships with others, what they are to do, how they are to do it, and the quality requirements of the job. They are in contact with subordinates, suppliers, and customers and receive and send thousands of words a day. Even more than others, managers are in the midst of this storm of words. They receive information from numerous sources, they digest it, and relay its interpretation to others in language the latter can understand. The ability to receive, translate, and transmit ideas is thus a quality that can contribute a great deal to the success of executives in motivating colleagues and subordinates.

Facility in Scientific Methodology. Rigorous training in scientific methodology develops logical thought processes and thus facilitates decision making. Since business problems are complex in nature, it is especially important that the manager who must decide the issues approach them in a logical fashion. The development of the ability to reason, an understanding of the principles of classification, and a confidence in dealing with complex phenomena are the ends that can be served by education in the scientific method.

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[8] Barnard, *op. cit.*, p. 197.

Cultural Interests. The importance of the possession of broad cultural interests may be discounted by those people who have a poor conception of the nature of the manager's job. Business enterprises employ candidates with managerial potential, not to fill a particular position, but to gain the experience and develop the judgment that will qualify them for successive advancement over a period of thirty to forty years. The maintenance of executive physical and mental health is a matter of prime importance to the enterprise. Knowing that executives will be engaged in decision making on a continuous basis for several decades, that the problems they face are enormously complex and the pressures of work ever present, and that the responsibility of the manager for his decisions is exceedingly heavy, the wise executive will, therefore, be inclined to agree with physicians that good health needs to be buttressed by the enjoyment of a nonbusiness environment in nonbusiness hours. The possession of an interest in cultural subjects is an excellent motivation to take the mind from business problems.

Affinity for Moral Values. The possession of an affinity for the moral values of society is of prime importance in a candidate for management. Executives bear a heavy responsibility for the welfare of others and for the society of which they are a part. Indeed, social organization cannot exist without a foundation of those moral values that are held in respect by the bulk of the citizenry. Since managers are widely imitated, whatever they do will influence the degree to which the social mores will be followed. They must, therefore, be men of integrity who act at all times in accordance with approved social precepts.

Man in
glass as
well as
in behavior

Judgment. Judgment is the pearl of great price for which all executives search when they employ and promote subordinates to supervisory positions. The term itself is by no means easy to define, for it is a complex which includes (1) care to recognize and evaluate all the factors in a given situation; (2) the habit of assessing these factors in the light of the total environment; (3) the practice of taking sufficient time to reach a decision; (4) the habit of making common-sense decisions; and (5) the ability to time properly the implementation of these decisions. Since the person with good judgment *habitually* follows these practices, it is apparent that judgment must be the resultant of executive qualities leavened by practical experience. Candidates cannot be trained in judgment. They need to possess high intelligence, they need a broad education, and they need practical experience. If the candidate can *combine* these elements, he will develop the quality of judgment. [illegible]

The Source of Managerial Personnel

+ long drawn [illegible]

Executives commonly complain that they are unable to meet the demand for managerial personnel who possess the above qualifications. There is every reason to believe that good managers are extremely scarce. However, it is quite possible that those who feel the shortage in greatest degree have failed to develop all the available sources. This failure is not merely a question of overlooking certain sources; it can also result from searching among these sources without knowing what qualities are essential to managerial success or how to recognize them. The desired qualities have been considered in the preceding section; the technique of their discovery will be suggested in the material on selection. The potential sources of managerial personnel are evaluated at this point.

Promotion from within. The phrase "promotion from within" has had wide currency for about half a century. It is a common phrase among many diverse disciplines, and for this reason its meaning has long since lost precision. It has even acquired an emotional content that contributes to its indiscriminate use. In its original and literal meaning, promotion from within implies that advancement into managerial positions will proceed from rankers, or workers, into front-line supervisory positions and thence upward through the organizational hierarchy. Thus, the firm is pictured as receiving a flow of new employees into nonmanagerial positions, from among whom selections will be made for appointments to the first step on the organizational ladder and for later promotion.

So long as the matter is considered on a nonpersonal basis, there is little question but that employees overwhelmingly favor a policy of promotion from within. The proscription of outsiders places severe limits on the competition for positions and establishes the rankers in a monopolistic position with respect to supervisory openings. Workers come to doubt the wisdom of the policy only when they are confronted with a specific case of selection of one of their own number for promotion. This same feeling is present at all levels of the organization. Indeed, the difficulty of selecting a general officer from among the sales, production, finance, or engineering managers, or a dean from among a group of professors, grows so large that enterprise managers are inclined to violate the policy of promotion from within and select an outsider.

The attitude of enterprise managers toward a policy of promotion from within is conditioned by similar conflicts of interest. To placate the more or less subordinate employees, the individual firm is likely to publicize bravely its adherence to this policy. William B. Given, president of the American Brake Shoe Company, writes that "it is our policy to give our own people the benefit of advancement as openings occur. We believe that unless we have no one who can possibly qualify it is not fair to our people to hire an outsider." [9] Even more emphatic is the position taken by Sears, Roebuck and Company. In a booklet given to prospective employees is the statement, "At Sears the policy of 'promotion from within' is not just a phrase or a slogan. It is a fact, insured by specific administrative measures to make sure that it happens." In similar places, General Petroleum Corporation states that its policy is to fill all promotional jobs, whenever possible, from within, and Procter & Gamble asserts that its policy of promotion from within is strictly adhered to.

Such statements by managements on the internal source of managerial candidates probably represent the general and official attitude of corporate executives. There can be little question but that they place heavy emphasis on the policy for the purpose of encouraging prospective candidates to accept employment. It is unknown whether these same firms give similar assurance to its middle and top functional executives. The saving phrase, "whenever possible," is quite sufficient to provide an escape valve.

The advantages of the practice of making promotions from the personnel within the firm are important. It not only has positive values in improved morale and in the reputation of the firm, but it permits the firm as well to take advantage of the presence of potentially fine managers among its personnel. Even though these positive but unmeasurable values are of great importance, their pursuit should not blind executives to the dangers of either overemphasizing this source or relying upon it exclusively.

The assumption underlying the policy of promoting from within is either that new employees are hired with a view to their managerial potential or that from among the new and old employees there will be a sufficient number of qualified candidates for promotion. The latter assumption, usually made by entrepreneurs in previous centuries, is unsafe for modern business enterprise. It is progressively dangerous as a population becomes differentiated in the degree to which its members seek education, since well-educated persons are more likely than the less well educated rankers to be the successful candidates for managerial positions.

The assumption that all employees are hired with a view to their managerial potential is contrary to fact. Indeed, most employees are hired for their acquired skills as machinists, electricians, PBX operators, typists, accountants, engineers, or statisticians. Those who are wanted because they possess these or similar skills are not refused simply because they have low managerial potential.

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[9] Bower, *op. cit.*, p. 79.

An exclusive policy of promoting from within leads to inbreeding, a characteristic of persons who are employed by the same firm for long periods of time and are trained for promotion by those who themselves have been trained in the same methods. It is true that inbreeding is not a fault if only the best methods, routines, and viewpoints are cultivated. But such a circumstance is likely to be an unapproachable ideal. Enterprises depend upon new blood to introduce new ideas and practices, the very elements competition forces the firm to cultivate. Consequently, there is every reason to avoid a policy that contributes to inbreeding.

Reliance upon a policy of promotion from within enhances the monopolistic position of current employees with respect to managerial openings and denies the enterprise the benefits of open competition. Since there is neither a legal nor a moral obligation to promote employees, it is incumbent upon those who manage a firm to decide whether the benefits of such a policy outweigh its shortcomings. There are forthright reasons for preferring free competition. It gives the firm, in the final analysis, the opportunity to secure the services of the best-qualified candidates. It counters the shortcoming of inbreeding, permits a firm to adopt the best techniques in the recruiting of managers, and eliminates the complacent heir apparent. To exchange these advantages for a morale factor would appear to be questionable.[10]

Exclusive reliance upon a policy of promotion from within is, therefore, dangerous to the welfare of the firm. As one of several sources of managerial personnel, the current roster of employees is, indeed, important. No executive would consider ignoring this area, for it unquestionably contains many individuals who are promising candidates and who possess the further advantage of being identified with the firm and knowing its personnel, history, problems, and objectives. Other things being equal, employees can and do compete successfully with outsiders. For the superior candidate, competition with all others from whatever source holds no hazards. At the same time, the enterprise confirms its freedom to seek the best managerial personnel wherever they may be.

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[10] It should be noted that the dangers of inbreeding and creation of monopolistic advantages for existing employees can be avoided by a large, diversified firm, even though it follows a policy of promotion from within. Promotion from within in these companies can provide competition over a fairly broad area of activity, especially if the policy of the firm permits it. Unfortunately, many diversified firms develop two or more distinct programs, *e.g.*, accounting, sales, or production, and confine selections for promotions to candidates in the requesting department. In so doing, they encounter the same evils of promotion from within as much smaller firms.

Selection of key executives from outside the company. The key executive is the one who supplies the vital force that sparks a program and carries it to completion. It is not inconceivable that these executives may be identified at all organizational levels. They may be the men who make the functional, service, and staff departments operate with vigor and efficiency. But, more probably, the key executive will be found at or near the top of the organization structure. He provides the tone, attitude, imagination, and judgment with which the enterprise attains its objective. Since subordinate managers tend to imitate their superiors in these respects, their contribution to a program may properly be ascribed to the inspiration of the dominating personality at the top of the organizational hierarchy.

The negative reason for recruiting key executives from the outside has already been suggested. It is the morale problem of dealing with grumpy, frustrated, uncooperative executives who have not been selected for a given promotion. Rather than create such conditions, which are extremely disagreeable, it is not uncommon for an enterprise to recruit a key man from outside sources, though he may be superior in no way to the internal candidates for the position.

Often there are positive reasons for selecting a key executive from the outside. In such cases the outside candidate is considered superior to the internal contenders for one or more reasons. For instance, many firms reach a position in their development where the outstanding need is for their energies to be directed vigorously toward the solution of marketing problems. In such cases, these firms almost certainly will turn to the outside for a new president. Promotion of internal men would be unthinkable, since they have brought the enterprise to its present stagnant position. Indeed, this is the situation that faced many firms during the 1920s, when key sales executives were brought in to guide the firms through a highly competitive period. For similar reasons, production men were imported by firms during the nineteenth century, and engineers have more recently occupied conspicuous positions with firms concerned with aerodynamics, electronics, and plastics. In these cases, the factor that is being sought is vision, new ideas, and new applications.

Trend toward formalizing managerial development. The policy of deliberately recruiting managerial candidates for the purpose of developing them into successful executives has a recent origin but an increasing number of practitioners. In some respects it is a last resort, adopted because other methods of recruitment have developed serious shortcomings. However, it is quite probable that a recourse to this practice has awaited expansion of knowledge about managerial functions and the identification of managerial qualities. The application of knowledge in these areas will give better results than those obtained from the trial-and-error methods of earlier decades.

Several complex factors are at work in bringing businessmen around to managerial development programs. Many firms have been startled by the gap between junior and senior executive age groups and particularly by the void that often exists in the middle-management levels. They are inclined to blame this situation upon the lack of hiring that characterized the 1930s. But the difficulty is more fundamental. Even in earlier periods these firms were relying upon the random appearance of employees with managerial potential. They were quite unaware that such reliance was sadly misplaced.

Some firms have turned to managerial development programs only after they fully realized the importance of the manager in enterprise. Others have waited for the development of successful selection and training techniques before embarking upon such programs. And still others have experienced some futility in relying upon outside sources for managerial personnel. There are, of course, many enterprises that still hire from without because they do not know how to develop managers, consider it too costly, or have found other enterprises that can be relied upon to produce candidates. These firms either knowingly or unknowingly live a precarious existence. The source of their future managerial candidates may dry up at any time. More likely, the personnel in the management-training groups will be so superior to the imported type that the firms relying upon the latter may be at a serious competitive disadvantage. As this lesson is realized, even the parasitical firm will turn to its own development programs.

Motivation of Managers

Deep concern with the qualifications of managers and with the problems of finding suitable candidates tends to obscure the point that managers do not work for enterprises. They work for *an* enterprise. Hence, the problem that faces the firm is how to persuade prospective candidates to select it from among all others competing for their services. This view of the issue is essentially modern. Before World War II, there were few firms following the practice of seeking the individual. It was typically the seeker of work opportunities who bore the entire risk and cost of searching out a prospective and usually unenthusiastic employer.

This situation was revolutionized as recently as the last decade. Business enterprises began then to scramble for candidates with managerial potential, persuaded to do so by their growing awareness that the manager's functions were different from all others, that entirely different qualities were required in him, and that they had a shortage of promotable candidates for executive positions.

But what incentives should be offered the candidate? Such a question could not be answered until something was known about motivation. The timeworn motive of monetary income was clearly not enough. Firms that paid good salaries often failed to attract good candidates. Slowly they became aware that the nature of man is enormously complex; that he has intense physical, spiritual, and social desires; and that the personal valuation he places upon these yearnings shifts, often violently, with their innate and recurrent nature and with the individual's age, education, and economic well-being. To such dynamic characteristics there needs to be added one more. It is that statistical averages and general observations obscure the important fact that the individual always has desires that do not square with those of the "average" man. Consequently, a successful approach to motivating prospective managerial candidates must be broad enough to encompass their dominant desires and still be personalized to care for individual needs. Some progress has been made in reducing the long list of human incentives to a manageable classification, at least as far as candidates for executive positions are concerned.[11]

Managerial candidates differ widely in their age, economic position, and maturity. Nevertheless, it may be helpful to consider the potential executive as one who begins his career with no other assets than innate drive and a good education. Such an oversimplification should not obscure the fact that the candidate is a vessel of warring desires, each with pressing claims upon his attention. He wants many things—opportunity, income, power, prestige, and status. Which to yield to first is an issue that, for many, may never be settled. And a lifetime may not be long enough for most to satisfy in some measure all these incentives. Circumstances undoubtedly deprive many potential managers of opportunity; most must give a total life to the economic struggle; few, indeed, succeed to positions of power. Perhaps in this complex may be found the reason for the human tendency to imbue with gradations of status every occupation, every department in a firm, every enterprise, and every classification of enterprises.

Opportunity for a progressive career. The dominant concern of a managerial candidate who stands on the threshold of his career is to find an enterprise that can and will give him a maximum opportunity to gain breadth, as well as depth, of business experience. He is well aware of his lack of practical knowledge but equally well aware that the only way to fill this void is through employment. A job, he knows, is not all he needs to qualify himself for supervisory positions. He requires a variety of work experience broad enough that his knowledge of the total operation of the enterprise will be increased, departmental interrelationships understood, and internal problems, handicaps, and limitations of the departments comprehended.

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[11] Barnard, *op. cit.*, Chap. 9; M. E. Dimock, "The Criteria and Objectives of Public Administration," in J. M. Gaus, L. D. White, and M. E. Dimock (eds.), *The Frontiers of Public Administration* (Chicago: University of Chicago Press, 1936), pp. 252–253; C. E. Griffin, *Enterprise in a Free Society* (Homewood, Ill.: Richard D. Irwin, Inc., 1949), Chaps. 4–6; and Hooper, *op. cit.*, Chap. 5.

As he scans the business horizon, the candidate will be thinking of the opportunities he will have for promotion after such experience has been acquired. Clearly, preparation for advancement is wasteful unless it can be put to use. It is at this point that the prospective employer, because of poor communication with the employee, is likely to lose patience with a candidate "who wants to be a top manager." The only answer the firm can give, and the only one sought by the candidate, is the average number of promotions made by the firm per year and the future plans of the enterprise. The candidate will favor the firm that annually fills fifty supervisory positions over that which has a record of promoting few.

Financial reward. It is difficult to say whether there is any stage in the career of a manager when the factor of financial reward is not of dominant concern. The young candidate begins to think in terms of his financial security as soon as he feels confident that he can gain experience and has an opportunity to compete for future promotions. It is at this point in his career that his family expenses begin to rise, that he develops a keen desire to live in the social strata of his future colleagues, and that he achieves a realistic conception of the importance of laying a solid foundation for financial independence. These are considerations that will be high on the list of incentives for much of his active life.

Power. By the time he discovers his susceptibility to a predominant desire for power, the manager will have already proved his ability to settle issues within the broad framework of enterprise policy, have demonstrated he can get things done, have developed a sense of good judgment, and have gained the confidence of his superiors. It is at this point that a freer rein can be given to exercising the power that enables him to influence people and events in the direction in which he wishes them to go. Power, of course, may be derived from diverse sources. In business enterprise it is derived from the authority to use both material and human resources. Hence, the manager who has reached this stage in his career has considerable leeway to change policies, practices, products, objectives, and public relations. There is a strong element of creativeness in such changes. The manager wants to try out new ideas, improve the orientation of the firm in the industry, and be able to point with pride to his handiwork.

Prestige. As the desire for power becomes less important, the desire for prestige becomes greater. The manager comes to value more highly that ascendancy which is derived from the admiration of his fellow human beings, whether they be his superiors, subordinates, or individuals unconnected with the enterprise. Such admiration may spring from the estimation of a man's worth based upon his reputation, it may reflect an acceptance by one's peers, it may arise from the favorable opinion of one's subordinates, or it may adhere to the executive who occupies or succeeds to a position surrounded by an aura of prestige. Whatever its sources, the desire to acquire the psychological satisfaction of being well thought of by other human beings becomes intense.

From one viewpoint, the executive may feel that he has arrived at the stage in his career when he can afford to seek actively the approbation of mankind. Like our Presidents, he begins to think of his place in history. The enterprise in which he has made his economic career is unlikely to afford opportunities for such an experience of prestige. Consequently, the manager turns to the broad field of public service, employing his talents in diplomacy, government agencies, welfare and research organizations, or educational institutions.

Modern Problems of Executive Compensation

- Don't worry

Financial compensation is an important factor in attracting and retaining executive talent. This characteristic is reason enough for discussing the sticky problems associated with managerial pay. Enterprises that are concerned with methods of remunerating executives and firms that are in the process of creating pay structures can learn much from an objective consideration of modern methods of developing a salary plan, handling incentive pay, and dealing with the influence of current taxation on executive remuneration.

Executive salary structure. In the interests of consistency, relative importance of services, and the avoidance of personalities, it is highly important for every enterprise to develop a salary structure. In these days when professional managers are in active charge of the most important enterprises in the nation there is often a need for executives to defend the salaries paid by the firm against charges brought by stockholders or government bureaus. The best defense is the existence of a logical framework of remuneration.

Several structural elements guide the building of such a framework,[12] among them proportion, level, and range. The element of proportion concerns the interrelationship that should exist between the salaries of executives. In a survey sponsored by the American Management Association it was found that the average relationship between the five highest-paid positions in 411 companies was as follows:

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[12] Much of the material for this section has been taken from A. Patton, "Current Practices in Executive Compensation," *Harvard Business Review*, vol. 29, no. 1, pp. 56–64 (January, 1951). See also J. L. Rigby, *Paying the Management Man*, Personnel Series, No. 148 (New York: American Management Association (1952), pp. 27–33.

President	100%
Second highest paid	76
Third highest paid	59
Fourth highest paid	47
Fifth highest paid	30

The point of chief interest here is that this relationship holds, regardless of what the president earns. Moreover, there is an important element of stability in the proportional relationship of specific positions. The evidence in the survey reflected the fact that chief engineers, controllers, advertising executives, purchasing agents, and industrial relations directors are paid at rates that vary between 25 per cent and 35 per cent of the president's salary. On the other hand, production managers, sales managers and treasurer were paid at rates ranging from 36 per cent to 45 per cent of the president's pay. Only the chairman of the board, the executive vice-president, and the top marketing executive were paid more than 50 per cent of the salary received by the president. Undoubtedly, further study would reflect a comparable proportionality in pay for positions in middle- and lower-management levels.

The element of levels in a salary structure concerns the absolute relationship between the salary rates in one firm as compared with other firms. On this point the AMA survey is quite revealing. The evidence indicates that the firms paying relatively high salaries were fast-growing, creatively competitive, and large-scale enterprises. However, the profit margin of a whole industry was quite an insignificant factor in determining salary levels. For instance, the data for 1949 showed that the profit margin of firms in such industries as steel and iron, textiles, auto and truck, retail chains, and department stores was considerably less than the margins reported in such industries as public utilities, petroleum and natural gas, nonferrous metal mining, heavy machinery, and groceries. Nevertheless, the salary level in the first grouping was above average, while it was below average in the second classification. The explanation offered was that the first group is creatively competitive and requires executives skilled in devising new designs and manufacturing methods. The supply of such skill would appear to be severely limited.

There can be no doubt about the influence of scale on executive pay levels. The average salary for presidents, for example, of firms in an industry with below-average compensation varied directly between $19,300 for firms in the $500,000-or-less profit classification to $81,600 for firms showing a profit of over $15,000,000. For the same classifications in an above-average compensation industry, the presidents' salaries averaged from $40,100 to $232,700. But the size of the firm is not in itself definitive. It is a fact, brought out in the AMA survey, that the larger firms reported a higher ratio of net profit to sales than the smaller firms. There is a clear, but unproved, inference that high-paying firms attract the better men and have a lower ratio of executive salaries to sales.

The element of range in a salary structure concerns the degree of difference between the maximum and minimum pay associated with a given position. The existence of an adequate range is important because it is a means of achieving flexibility. A range permits merit increases and differentiation between persons in terms of age, experience, value to the firm, and other factors. Range is the characteristic of a structure that provides still further salary incentive for an executive to grow in judgment, creativity, and other values.

Incentive pay. The purpose of establishing an incentive pay system in addition to the salary structure is to take further advantage of the desire of executives for increased income. The incentive system has other important advantages. It may enable a company to obtain the services of an outstanding man in situations that make it impossible to pay him a large salary. If incentives are tied into the net profits of a firm, the owners stand to gain. And payments under the incentive plan for good performance in one year are not built into the salary structure.

Development and administration of an incentive pay scheme to reward individual performance are enormously difficult. This type of program requires that the incentive be based upon an identifiable and measurable contribution, such as increase in sales and output quotas, a reduction in expense ratios, or savings in budgeted costs. Defining, identifying, and measuring the personal contribution of an executive with respect to such factors is laborious at least, and lacks exactitude. Increased sales or production can often be traced to such nonpersonal forces as a rising gross national product, government aids, and war. Savings in certain types of costs can be very expensive. For example, cutting down unduly on expenses may have a long-run harmful effect on sales and profits; savings measured against budgeted costs can mean overwork, speed-up, and disastrous skimping on merit salary increases of subordinates or on outlays for marketing research, engineering, or training.[13]

Incentives based upon improvements in the over-all performance of the firm reflect not individual contribution but rather teamwork on the part of executives. The AMA survey unquestionably proved that the opportunity for increased executive compensation rests squarely upon the expansion of profits. The recognition of this fact has resulted in a doubling of the number of firms paying some type of bonus between 1945 and 1949. Those that are related to enterprise profit are shares paid out of profits (profit bonus), stock-purchase agreements, and stock options.

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[13] For an opposite view, see A. Patton, "Incentive Compensation Develops Executives," *Advanced Management*, vol. 17, no. 4, pp. 7–10 (April, 1952). Despite the persuasive argument set forth here, the fact remains that a realistic approach would involve the modification of an organization structure in terms of profit and cost centers, and their integration with the total profit earned by an enterprise.

In the first plan, a percentage of annual profit is set aside for distribution among executives. The actual method of dividing shares can differ rather widely. For instance, participation can simply be based upon relative salaries. Or only a fixed share of the fund may be treated this way, the remainder providing a sum for the remuneration of special and generally recognized personal service to the firm. Again, the actual distribution may be made partly in cash and partly in capital stock.

Among the problems of administering this type of bonus is that of determining the size of the pot and the identity of the participants. For example, the General Motors Corporation divides a fund equal to 12 per cent of net profit after 5 per cent is earned on invested capital.[14] All employees earning over $6,000 are eligible to participate. The importance of this bonus plan is indicated by the fact that in 1952, the top seven officers of the company received $1,023,300 in salaries and $2,310,000 in bonuses.[15] The total bonuses distributed by this company are considerable, totaling $52,700,000 in 1951, with some 11,600 employees participating. Clearly, the distribution of so large a sum to so many participants is a difficult task. Even in much smaller firms the task is formidable. But there is no doubt that, where bonus plans exist, the shares are likely to be large compared with an executive's salary. Depending upon the earning power of the firm, bonuses to presidents in 1949 ranged from 54 per cent to 84 per cent of their respective salaries.[16] On a comparable basis, the bonuses of nondirector officers ranged from 23 per cent to 37 per cent of their individual salaries.

Participation in this type of incentive varies widely from firm to firm. However, the AMA survey reported enough evidence to substantiate the general conclusion that small corporations tend to confine participation to their chief executive and that larger firms usually permit the participation of nondirector officers and middle managers. For small firms, profit participation may have been the only means of attracting an able chief executive (who may be the sole or dominant stockholder); in large firms wider participation may forestall public censure or inquisitiveness from internal revenue collectors and be an important incentive to achieve a high degree of productive teamwork.

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[14] Patton, *loc. cit.*

[15] "Management Pay: Trend Levels Out," *Business Week*, May 23, 1953, pp. 110–118.

[16] Patton, *op. cit.*, p. 61.

Agreements exist in a number of cases between the corporation and the individual executive for the purchase of stock. The best argument for such agreements is that the purchase of stock will unite the interests of both the executive and the firm on a continuing basis and that an incentive factor is supplied by rising market values based upon profit expansion.

The stock-option incentive system, whereby the executive receives an option to purchase his firm's stock at a price upwards of 95 per cent of its market value, is widely employed, since it has no risk for the manager until he exercises the option. The firm stands to gain as a result of the incentive held out to the executive to increase company profits, it is possible to attract able managers by this means when others fail, and it tends to keep at a low level that part of overhead represented by executive salaries. Since 1950 a change in the tax law has seemed to promise that income derived from stock options which met specific requirements would be taxed as a capital gain. However, state courts are inclined to hear cases brought by stockholder interests and inquire particularly into such questions as whether corporations are getting their money's worth and why so many plans should be restricted to key executives.[17]

Effects of taxation on executive compensation. In the preceding section incentive pay for executives was viewed as a device to acquire the services of skilled managers. But incentive pay, as well as various methods of deferred payment, is also affected by the high personal-income-tax rates. Often the situation occurs where a firm may wish to increase an executive's salary in order to provide an incentive for continuing good performance, only to find that much of the increase will have to be paid out in taxes. The net result is, of course, that salary increases are deprived of their incentive value for upper-bracket executives.

The stock option seems to offer the best opportunity for meeting this situation. It appears to have built-in features that would prove very attractive for executives. One is the opportunity to speculate in the stock subject to the option without any risk. The satisfaction of tax claims by paying at the capital-gains rate is another. The ultimate settlement of legal doubts about the validity of stock options may determine for many firms the future of this type of incentive, although these doubts appear to be resolving in favor of reasonable option programs.

The high tax rates have fathered many other compensation practices, which have one point in common: the recognition that increases in current income are of little benefit to highly paid executives. Hence, the plans envisage some type of deferred payment. Among these are pensions[18] and future employment contracts. The former are well known. They were originally justified on ethical grounds: having spent a lifetime in the service of a corporation, the executive was thought to be entitled to a retirement income. However, rising taxes have provided another important reason for pensions. The drawback in such compensation, of course, is that a person must live to enjoy deferred income.

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[17] "Booby Trap in Stock Options," *Business Week*, Sept. 6, 1952. For a discussion of the use of warrants, a variation of stock option plans, see "Either Way It's a Capital Gain," *Business Week*, Apr. 11, 1953.

Current tax laws have inspired some firms to conclude a contract with their executives that provides for a substantial salary after they leave active management in return for their promise to (1) act as a consultant; (2) not work for a competitor; (3) serve on the board, if elected, without pay; and (4) refrain from taking another job that would interfere with their consultation services. Although the legality or tax aspects (from the standpoint of deductibility to the corporation as a reasonable business expense) of such contracts are not yet certain, corporations are adopting the idea with enthusiasm.[19]

One criticism that may be offered in connection with the search for an effective way to provide incentive compensation for executives concerns the narrow viewpoint with which this issue is approached. Most experts seem to be concerned primarily with the incentives for a minute number of highly paid executives.[20] The much larger number of less well paid managers, however, may be assumed to have similar incentive and tax situations. It is probable, however, that often their greatest need is for immediate cash income and that consequently less effort should be placed upon devising tax benefits and more upon cash incentives for efficient performance.

Another criticism of this solution to the problem concerns the tendency to overlook the best interests of the stockholders. A proper policy is one that will contribute to the well-being of *both* owners and employees and square with the welfare of the nation. Excessive attention to the financial position of a scattering of high-income executives tends to obscure, and indeed may become a danger to, the well-being of other interested parties.

Executive Job Evaluation

One of the persistent problems concerning executive compensation is the determination of the relationship that should exist between positions.

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[18] For current pension payments to officers of many large corporations, see *Business Week,* May 31, 1953, pp. 116–120.

[19] Cf. *Executive Severance Contracts* (New York: Koster, Dana & Company, 1953) and V. H. Rothschild II and W. J. Casey, *Pay Contracts with Key Men* (New York: Business Reports, Inc., 1953).

[20] A. Patton, "Executive Compensation," *Harvard Business Review,* vol. 31, no. 6 (November–December, 1953).

Some sort of decision must be made in order to differentiate the salary range. For instance, the vice-presidents of a firm will ordinarily earn more than their subordinates, and some subordinates more than others. Why?

In reaching a satisfactory answer, enterprises may choose between two procedures. On the one hand, they may use the statistical evidence relating to their industry. The nature of this information was suggested in the preceding section. The surveys, particularly those conducted by the American Management Association, the National Industrial Conference Board, and the reports of the Securities and Exchange Commission are sufficiently broad to permit the average reported differentiation in pay scales for particular executive positions to be used with confidence.

On the other hand, the corporation may prefer to proceed directly with the determination of position relationships in its own organization structure. In this case, it is essential to evaluate each job systematically. If the problem is conceived as one in which not only top posts but all managerial positions are to be differentiated for compensation purposes, the job evaluation is the only alternative available, since the reported average pay differentials relate to the top three to five jobs only.

Job evaluation defined. Job evaluation has been defined as "a procedure that develops a rating for each job indicating how its contribution compares in value to all other jobs in the firm. It lists the factors that are paid for in all jobs and creates scales or measures for each such factor. Then it rates each job on these scales and summarizes these ratings to provide a composite valuation for each job." [21] This view is particularly applicable to nonmanagerial jobs. Executive positions are evaluated in the same way, but the evaluation is more difficult in that the compensable factors are less easy to isolate and measure. The results of such evaluations serve many purposes. Here they are related to the assignment of salaries to specific managerial positions.

Prerequisites to evaluation. A satisfactory evaluation of managerial positions requires that prior consideration be given to the existence of definite and complete job descriptions and to the proper organization of the undertaking. Systematic job descriptions are important because from them are selected the compensable factors that differentiate the value of a given job from all others.

Success of an evaluation program is largely dependent upon its getting and retaining top-management attention. The proper compensation of managers is no light matter in any firm, and the best way to achieve good results is to place the responsibility for the general supervision of its administration in a committee of top-level managers. This problem is more complicated than would appear. Quite clearly, the differential compensation of men who report to the chief executive should receive the continuing attention of the board of directors. On the other hand, subordinates of the top-level executives and at successively lower levels should receive consideration from the president's executive committee. But the integration of the work of these two groups is frequently difficult.

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[21] D. Yoder, *Personnel Principles and Policies* (New York: Prentice-Hall, Inc., 1952), p. 433

Techniques of evaluation. Discussions of evaluation techniques usually include a description of four methods.[22] Job ranking and job classification are methods that are widely employed in relatively small firms. The former is quite informal: a committee merely studies job descriptions and, perhaps, observes the job, notes several elements to be considered in the comparison process, and ranks specific jobs on the basis of the complexity of requirements. The second method begins with a broad grouping of jobs, such as engineering, administrative, or production, considers the skill requirements for each job, and develops job classes within each functional series.

The widely used point, or manual, method employs a job-rating scale. Scales are needed for each element selected for measurement, and each must be supplemented by a descriptive scale, so that the rater will have a ready guide to aid him in determining the specific number of points to assign each element. The factor-comparison method starts with the selection of the job elements for which a firm pays. The next step involves the determination of the money value of each element. The committee studies a list of key jobs, in terms of the pay attached to them, and then determines how much of the salary is paid for each element. The composite opinion of the committee members results in the weight to be applied to each factor discovered in all other positions to be rated.

All these techniques involve subjective measurements. In the selection of elements, in determining for what factor a firm pays, in arriving at the weight of these factors, and in comparing positions on the basis of these measures, the enterprise inevitably resorts to estimates. But some such process is helpful in order to achieve approximately equitable compensation differentials, particularly for middle- and lower-level positions. Because considerable empirical data exist concerning average differences in pay for top-level positions in industry, it may be desirable to start the evaluation procedure at this end of the scale.

Importance of periodic evaluation. The importance of periodic review should be stressed. Evaluations tend to get out of line for two reasons. On the one hand, the responsibility of the position holder can be changed quickly by modifications of his work assignment. Occupants of a particular position vary in terms of age, experience, effectiveness, or alertness, and their superiors are prone to change the work assignment accordingly.

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[22] *Ibid.*, pp. 434–437.

The second factor concerns a more fundamental matter. Let it be assumed that the qualities for which a firm pays its executives are experience, mental and educational achievements, ability to influence people, imagination, creativeness, and responsibility for financial decisions. The sales managership, for instance, in an automobile factory is quite a different position in 1954 from what it was between 1945 and 1953. The person who holds this position now certainly requires much more creativeness, imagination, and ability to influence people than was previously needed. Consequently, these factors would now be weighed much more heavily. Such a change is certain to result in a higher evaluation of the position than formerly because it contributes much more to the firm than it did then.

Similarly, general environmental changes, innovations, discoveries, and like factors can have a revolutionary effect on the evaluation of a particular position. Note, for example, the differences in the evaluation of a chief engineer's position in an electronics factory and in a cotton textile mill; the devaluation of arithmetic skill with the development of calculators; the relative decline in the weight of education, since most management men now have good educations anyway; and the declining risk, because of expert staff work, in the making of decisions.

Selected References

Barnard, C. I., *The Functions of the Executive*, Chap. 9. Cambridge, Mass.: Harvard University Press, 1938.

Bower, M. (ed.), *The Development of Executive Leadership*, Part I. Cambridge, Mass.: Harvard University Press, 1951.

Dale, E., *Planning and Developing the Company Organization Structure*, Research Report 20, Appendix A. New York: American Management Association, 1952.

Hooper, F. C., *Management Survey*, Chap. 6. London: Sir Isaac Pitman & Sons, Ltd., 1948.

Mace, M. L., *The Growth and Development of Executives*, Chap. 2. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1950.

Newman, W. H., *Administrative Action*, Chap. 18. New York: Prentice-Hall, Inc., 1951.

Riegel, J. W., *Executive Development*, Chap. 2. Ann Arbor, Mich.: University of Michigan Press, 1952.

Uris, A., *How to Be a Successful Leader*. New York: McGraw-Hill Book Company, Inc., 1953.

16

MANAGERIAL APPRAISAL, SELECTION, AND PROMOTION

The firm that has developed a policy concerning recruiting, appraising, selecting, and promoting candidates for managerial development has taken a major step to keep itself attuned to the modern environment. It has, on the one hand, considered the risks entailed in random recruitment and hiring from competitors and found them too heavy to bear. On the other hand, it has reached the conclusion that the execution of such policies will yield positive results.

Although the forms and procedures suggested in this chapter are treated from the viewpoint of an efficient appraisal, selection, and promotion program, they are readily useful for purposes of merit rating. There is a basic distinction between the information required for promotion and for merit rating, although many items are common. In the latter case the quality of the manager's performance *in his current position* receives exclusive attention. The conclusions reached in this appraisal are the basis for recommending increases in pay within the salary bracket for the position.[1] For promotional purposes, the evaluation is broader. It includes not only the data for merit increases in pay but also an assessment of a manager's capacity for growth and currently unused assets. For example, a supervisor may have a marked though latent capacity for planning or a highly developed sense of responsibility of the firm in society but have little opportunity to demonstrate these assets in his current position. In practice some firms employ the same forms in rating for different purposes, but others will be more discriminating.

The Magnitude of the Recruitment Problem

The execution of a policy of developing future managerial personnel logically proceeds from an understanding of the sheer magnitude of the job. It is essential for the firm to know how many candidates need be appraised each year in order to provide the requisite number of selections. But the estimating and counting process cannot begin until there is an understanding of the meaning of recruitment. To some this term will mean the number of college graduates who will be selected for management development each year. To others, this concept may be expanded to include the number who are selected from among the ranks. Still others will include the selection of experienced men from both within and without the firm to fill middle- and higher-level positions.

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[1] W. Hodge, "Merit Rating Plan for Executives," *Factory Management and Maintenance*, vol. 111, no. 10 (October, 1953).

The scope of a managerial development policy. It seems apparent that the execution of a development policy rests upon a definition of the positions to be included and the source of candidates. On the basis of the argument developed in the preceding chapter, the appraisal and selection program should ideally embrace the recruitment of candidates from all available sources.

Settlement upon the jobs to be covered can be troublesome. Specifically, shall the program include front-line supervisors? There are many reasons for excluding them from the development program. These relate to their educational qualifications and the nature of their job. The front-line supervisor, whether he be a foreman, a chief clerk, or an office manager, occupies a position that requires considerable technical skill relative to the operation of machinery and equipment, the making of minor adjustments, techniques of various sorts, and a knowledge sufficient to evaluate the quality of the work turned out. He needs this foundation in order to be able to teach new hands and to direct all subordinates in the work group. The person with this skill and knowledge is perhaps most efficiently trained in a nonmanagerial position and promoted thereafter from the ranks.

At this point the critical question is whether particular persons with managerial potential are assigned to nonmanagerial jobs for the purpose of acquiring these technical skills and knowledge or whether enterprise managers depend upon the random appearance of potential front-line supervisors among their work crews. It is unfortunately true that most enterprise managers generally follow the second alternative.[2] In so doing they run into serious educational deficiencies in prospective candidates. The nonmanagerial employee may have finished his high school training and, in some cases, may have completed vocational training in commercial schools. But he is unlikely to have the facility in communication, scientific methodology, and the broad educational background essential for successful upper-level managers.

Even though these differences tend to set apart candidates for front-line supervision from the men who are selected for executive development, there appears to be even better reasons for including them in the management selection and training program. Although they may be operating under an educational handicap at first, this shortcoming can be repaired by those who have the necessary foresight, interest, and drive.

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[2] *Labor Policy and Practice* (Washington: Bureau of National Affairs, 1952).

Even if these men are older, on the average, than the college graduate, they are often superior to the latter in their experience. Moreover, if the enterprise executives do not wish to deprive themselves of potential managers drawn from the ranks, it is essential that the recruitment program be sufficiently broad to include all positions from front-line supervisor to president.

Factors in the demand for managerial personnel. The actual magnitude of the recruitment program is affected by several factors. The first step in arriving at a reasonable figure for the average number of selections to be made each year is to count the number of managerial positions that currently exist. Such a task is easy for any firm that maintains its organization chart in a complete and up-to-date manner.

The next factor to be considered is the extent of the turnover in managerial personnel. Rather than rely upon recent experience in this regard, a better sample can be obtained if the immediately preceding five-year period is considered. The evident purpose is to arrive at a stable figure that represents the annual average number of appointments made to supervisory positions. It is most useful to express this average in the form of an index or as a ratio.

At this point a careful review of the current position of the firm with respect to its existing supervisory personnel should be made. This inventory is developed by classifying managers as (1) prospects for promotion, (2) those who should be retained in their jobs but are not promotable, (3) those who should be replaced, and (4) those who are about to retire. This information, supplemented by a time and position schedule for each promotable manager, is useful for determining whether the demand for selectees will be greater than average for the next year. The firm following such inventorying consistently will be able to plan its managerial development program.

Since the problem is to determine the number of selections to be made for the succeeding year, it is important to allow for any foreseeable changes in the organization structure. This step requires an evaluation of plans made by the officers for the expansion or contraction of enterprise activity, and translation of these plans into the number of managerial positions that will exist in the next year. Application of the turnover index to this total will yield the probable number of changes to be made in managerial personnel during the succeeding year.

The final step involves the determination of the number of trainees to be selected. Enterprises vary widely in their practices here. Some follow the conservative one-to-one ratio between the number of selections and the number of probable openings. Others adopt ratios of two, five, and even ten to one. Every firm runs into an attrition rate of large or small proportions. Selectees leave the program for many different reasons.

Some do not like the enterprise or its policies, some leave for reasons of health, some are attracted to other firms, and some even decide to change their profession or occupation.

The firm that adopts a low ratio has usually found ways to keep the attrition rate low. They may have developed productive recruitment, appraisal, and selection policies. They may have given careful attention to selling their enterprise to recruits or may have taken special care to provide appropriate incentives. On the other hand, the enterprises that adopt the practice of selecting a high ratio of potential managers may be neglecting the above practices. In addition, they may have attempted to hoard potential supervisors. In this they can succeed for a considerable time, but eventually the low probability of promotion discourages many of the best selectees, and they leave for employment in other firms. Such an enterprise is in the position of a football coach who has so many good players that relatively few of them get into the play.

Relation between the number of selectees and the scope of recruitment. A considerable amount of judgment is involved in deciding the actual number of persons to contact through the recruitment process. The number of recruitments, the number of persons appraised, the number of selectees, and the number of managerial appointments reflect a descending order of magnitude. It remains for the individual firm to determine, on the basis of its past experience and its evaluation of near-term conditions, the appropriate number of original contacts to make. This is the predetermined total that should yield the desired number of applicants from which the selectees will be drawn.

The purpose of recruitment is to persuade apparently desirable men to apply for management development. Distasteful as this process may be to firms staffed by executives with a backward look, it is nonetheless necessary actually to sell the firm to the potential candidate. Widespread and active competition between larger employers forces all firms, even the reluctant, to enter this race for the best potential managers. Enterprises have competed for them for more than a decade in a sellers' market.

Every firm has to decide whether to engage in extensive or intensive recruitment. From a theoretical viewpoint there is a better chance to attract the kind of persons who are wanted if the enterprise arranges to interview five persons from twenty sources instead of one hundred persons from one source. There is a considerable danger in the second alternative of scraping the bottom of the barrel for talent. But this general principle needs to be modified considerably in practice, because it carries with it the underlying assumption that quality is evenly distributed among sources. Colleges differ widely in the quality of their graduates, however, and business firms vary widely in the quality of their supervisory personnel.

There are other factors involved in this problem. Businessmen know that the number of people who can be interested in their firm also depends upon such factors as climate, geographical distances, and personal interests. It is for reasons of this nature that New England firms are reluctant to recruit in California. They can keep down the number of separations by drawing upon potential managers from nearby localities because the personal ties of these people condition them for local employment.

As a consequence of these factors, the individual firm will gradually develop a group of specific sources, whether they be universities, other firms, or their own rankers. Many even rely on college faculty people to recruit for them from among key personnel in graduating classes. But whatever practices are followed, they must yield the requisite number of bona fide candidates for appraisal.

Managerial Appraisal: Nature and Purpose

Nature of the problem. Managerial appraisal involves the process of judging the qualifications of candidates for executive positions. The appraiser endeavors to weigh or evaluate the potentialities of applicants for the quality of their performance in management positions and their promotability.

A generalized formulation of the appraisal problem is possible because the men who manage perform the same functions. The man-specification for all managerial positions reflects the common requirement that the person needs to be able to plan, organize, staff, direct, and control. Common though this requirement is, it will be recognized that specifications will differ, depending upon the level and complexity of the managerial job to be done. For instance, a front-line supervisor on a production line may be required to have more experience in the activity than an office manager needs for the supervision of a stenographic pool. These position characteristics can be reduced to chart form and become the familiar man-specification profile. It reflects the ideal qualifications of the manager who would occupy a given position.

The problem that faces the appraiser then becomes one of drawing the profile of each prospective or present manager. He tries to identify and evaluate each qualification that the applicant has and to report the result in such a form that others can compare the candidate's profile with the man-specification profile.

Objectives of appraisal. The purpose of appraising managerial candidates is to facilitate selection. Unfortunately, this purpose is too often viewed as a short-run objective. Many managers appraise hurriedly in order to find quickly a man for a vacant position. Such opportunism is bound to yield relatively poor results. It is exceedingly costly, and it denies the validity of management development.

If it is true, as one writer puts it, that an institution that cannot produce its own leadership, *i.e.,* executives, will die,[3] it is clearly essential for enterprise officers to take the long view of the appraisal process. The objective must be interpreted in terms of evaluating candidates with a view toward their potentiality for successive promotions upward through the organization structure until the topmost rung in the ladder has been achieved. For reasons considered in the previous chapter, enterprises continue to find themselves facing the necessity of developing their own managers. The typical top executives of large firms have shopped around very little.[4] This means that management development opens up a career for the potential manager in his mid-twenties, sees that he gets the proper experience with appropriate timing, and follows his promotion history until he retires.

Managerial Appraisal: Current Shortcomings

Managerial appraisal practices are by no means new. Ever since one man employed another, candidates have been appraised. But appraisal practices have taken on new meaning and significance in the second half of the twentieth century because of the gradual acceptance of the concept that managers have distinct functions. This view has encouraged both employers and students of management to take a careful look at executives from the viewpoint of finding out why some succeed where others fail. Since the answer to this issue has numerous practical applications, many diverse and often ingenious approaches have been made. Perhaps the very diversity of the attacks reflects basic shortcomings in appraisal methodology.

Favorite misconceptions. Many appraisal attempts have failed because they rest upon misconceptions of scientific methodology. These types of failure are ordinarily encountered at the level of the "practical" man, who simply suffers a lack of training in the basic tenets of scientific procedures.

Ignoring the Problem. More than a few people feel that problems solve themselves if they are simply ignored. These individuals either lack foresight or feel themselves helpless before the issue. Particularly in the case of small and medium-sized enterprises the current managers are extremely busy with day-to-day work. These are the familiar type of employers who, suddenly struck down by accident or time, leave the enterprise with no capable successors.

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[3] P. F. Drucker, *Concept of the Corporation* (New York: The John Day Company, Inc., 1946), p. 31.

[4] *Fortune Magazine,* November, 1952, p. 132.

There are other managers who understand that it is desirable to develop able successors but who deliberately turn their backs on the issue. By pure force of will they take the view that there is no problem. These individuals have no confidence that either they or any one else can discriminate between candidates with respect to their potential managerial qualities. Consequently, they adopt a fatalistic attitude with respect to their probable successors.

It is apparent that real problems that are ignored simply fail of solution. All advances in knowledge have been based upon an exact statement of issues. This is the first step in scientific procedure. No one will ever know anything about discriminating appraisal procedures until managers face the problem, analyze it, develop appropriate techniques for its solution.

Reliance on Random Development. There are executives who recognize the problems involved in appraisal and who, having no confidence in current practices, are content to rely upon the random appearance of acceptable successors at such times as they are needed. Such content is a rationalization for a do-nothing policy. The misconception that is present here relates to the factor of random development. It is assumed that in the ordinary course of enterprise activity the candidates who possess the requisite potential for management will "obviously" emerge from among subordinates in sufficient numbers and at the right time.

There are two important factors that reflect unfavorably upon such an assumption. Potential managers must enter at the nonmanagerial level if they are to emerge eventually. But do they? Certainly some do, especially those who advance to front-line supervisory positions. However, confidence in this exclusive source of personnel is difficult to maintain in the face of the general insistence upon a high educational level for executives and the common competitive practice of recruiting potential managers both from colleges and from other firms. If the well-managed and progressive enterprises do not rely upon the random appearance of potential managers in the labor ranks, there must be a good reason for such behavior.

Even if a firm could rely upon this source, there still remains the issue of recognition of these men. What, after all, is "obviously" apparent about such men? They may be known by their dominant personality, overbearing attitude, or empire-building proclivities. Indeed, some executives deliberately wait to see which subordinate will rise to a dominating position over his colleagues before selecting him for promotion. The point here is that willy-nilly these are the very characteristics by which the prospect is appraised. Thus, although the executive denies that anything is known about appraisal, he is himself appraising subordinates the moment they become "obvious" to him.

Dependence on Practical Experience. Dependence on practical experience is the misconception of those executives who "know how" to pick their subordinate managers. Such superb confidence is a strange attitude, for surely these people are not unaware that the bases for such selection are conspicuous for their variety and unique character. The executive thus selects a subordinate because he wears the same school tie, is a good athlete, is an admirable physical specimen, is obsequious and given to flattery, or has red hair.

Despite the faith they place in their appraisal techniques, the men who follow such practices are obviously victims of a misconception. In a situation in which everything points to the complexity of the appraisal process and to the expensive procedures of leading firms who believe in it, it is simply naïve to act as though simple factors such as those suggested above are significant in identifying potential managers.

Misuse of appraisal practices. Some current appraisal practices have an entirely different source of error from those based upon misconceptions. They result from inattention or from attempts to apply certain isolated psychological techniques.

Questionable Interview Techniques. Interview techniques of executives run the full gamut from ridiculous to productive practices. The result is to make one wonder whether anything is actually known about the value of interviewing.

The busy executive often follows techniques that, while perhaps not deliberate, are unproductive. He will make an appointment to see a candidate, permit the allotted time to be absorbed by other matters, hurry from his office on his way to another appointment, and as he does so, shake hands with the candidate while telling him that no opening exists just now. In another manifestation, the busy employer will keep his appointment but permit the interview to be sandwiched between numerous phone calls. Whatever else may be said about these executives, they are operating under a misapprehension if they think that their interviewing responsibility is being discharged. And as for the candidate in each case, he is well advised to shun employers who operate in this way. An applicant is as worthy of his interview as an employee is worthy of his hire.

Some of the executives of the larger corporations are giving some attention to interviewing the wife of the candidate. They want to be as certain as possible that the applicant is married to a woman who is socially adaptable and who has the potentiality to mature with her husband. This factor can have very important bearing upon both the acceptance of the candidate and upon his future career.

The guided interview has received a considerable amount of attention in recent years. Its protagonists are looking for some method to counter-act the common practice of interviewers to permit the conversation to drift into inconsequential fields and to dwell too long on a few items of information. To combat this shortcoming the interviewer is provided with a list of subjects that someone thinks should be covered. It may include such data on a man's background as his environment, associations, ambitions, and information about his achievements, aptitudes, interests, and attitudes. Sometimes the interviewer will be provided with a rating scale for each element in order to make certain that the coverage is complete.

To the extent that the guided interview does develop the desired information there is no question of its superiority over any haphazard procedure. But there are two issues, each of which is capable of rendering the interview quite valueless. One relates to the importance of training the interviewer. He does not come innately by this skill. It is essential to develop skill to know what the questions purport to bring out, to ask related questions, to interpret the questions to the candidate, and to evaluate the information received. A second difficulty is that the right information needs to be elucidated. Quite clearly, a guided interview can be carried out without yielding the needed data. Hence, the essential problem is to develop some methodology which will clarify the appropriate areas of useful information.

Reliance upon Superficial Group Estimates. A common practice in managerial appraisal policy followed by numerous firms is the group estimate. Basically, the theory is that a common judgment is needed in order to be certain that a man is appropriate for the position. Thus a government bureau or a business firm will build a list of several managers who can spare the time to interview a candidate. Each in his turn informs the applicant about his area of operation, learns about the background and characteristics of the potential employee, and reaches some conclusion about his acceptability. This opinion is communicated to the individual who arranged the interviews, and he takes action in accordance with the evaluations.

The group estimate will do one thing well. It will reveal with a great deal of certainty any potential personality conflicts. After a man has been passed around to three or four managers and taken to lunch, cocktails, or dinner with several of his potential colleagues, there can remain little doubt about his personal compatibility.

This very advantage can often hide serious shortcomings with the group estimate technique. The temptation to decide upon a candidate on the basis of his personal acceptability is very great. If this is the only information the enterprise has about a candidate he will remain a great risk. This interview technique can be rendered largely useless by its very haphazardness. Are the interviewers supposed to do more than evaluate the candidate's personality? If so, the group estimate procedure is open to all the criticisms leveled at the other techniques considered in this section. Furthermore, how is the executive who has arranged for the group estimate actually to evaluate the opinions he receives? Oftentimes a negative position taken by one interviewer is permitted to outweigh the positive opinions of all the rest. Sometimes the reports may all be favorable but no manager wants the candidate. Can an appraisal under this circumstance be fruitful?

Reliance upon Tests. Perhaps the greatest impetus to psychological testing was received during World War I, when the United States Army proceeded to administer an intelligence test to its personnel. These tests were originally developed for use in the schools of the nation. In the postwar period there was a noticeable increase both in the types of tests and in the fields of application. Exaggerated claims about the efficacy of testing have grown into a strong chorus as the procedure has become commercialized.

Business executives have responded to these claims in a characteristic way. All seem to exhibit a profound bewilderment. Many rely implicitly on these tests, others administer them for fear they might be missing a bet, and still others have nothing to do with them.

Although there are several hundred "standard" tests, they may be readily classified in five groups. Intelligence tests are designed to measure mental capacity and emphasize memory, speed, and interrelationships. Proficiency and aptitude tests are constructed to discover existing skills and the potentiality of candidates for acquiring such skills. The vocational type of test is designed to discover the occupational outlet that best suits the candidate. The assumption is made that men who do well in a given vocation possess similar interests. Personality tests were the last to be developed. They are designed to measure the candidate's potentiality for leadership.

On the basis of present knowledge, certain conclusions with respect to the value of testing candidates for managerial positions may be suggested. In the first place, all these tests suffer from a lack of validation. What is needed is an answer to the question: Is this test, or this group of tests, discriminatory in the initial selection of potential managers? In view of the nature of the task, logical deduction would lead to a negative answer. Certainly at the present time it may be asserted that psychological tests for this purpose remain generally unreliable.

A second conclusion is that "package" testing is often misleading. There are two aspects of the package deal. One relates to the group of tests to be given a candidate, and the other relates to giving the same tests to candidates in all types of enterprises. As far as managerial candidates are concerned, the industrial psychologist may be pleased to know that, if he could ever develop a battery of discriminatory tests for managerial candidates, it would actually be applicable to all types of enterprises, since all managers undertake the same functions. However, since it is not known at present what qualities are essential for successful management, the package deal is likely to fail in its purpose.[5]

The third conclusion relates to the emancipation of business executives from the feeling that they have to give tests. Enterprises can, however, effectively proceed to establish a management-development program on the basis of suggestions incorporated in the succeeding section.

Appraisal of New Candidates: Suggested Program

The point was made in the preceding chapter that there are neither "standard" managerial positions nor known personality characteristics of good managers. It was concluded that the most promising approach to managerial appraisal was through an analysis of what managers do and the deduction therefrom of the qualities that would facilitate its accomplishment. The appraisal procedure suggested in this section rests upon an analysis of the degree in which these qualities are possessed by candidates.

Managers subject to appraisal. The appraisal program is applicable to all candidates for positions involving managerial activities either prior to their employment by the enterprise or prior to their promotion from nonsupervisory jobs. Since the purpose is to make an initial appraisal of applicants, this program is suitable for evaluating college graduates who are interested in management, workers who are recommended for promotion to front-line supervisory jobs, and outside candidates for any managerial position in the firm. The level to which these candidates aspire is entirely immaterial. Even functional department heads and presidents who are recruited from outside sources should be appraised through this technique.

However, this program is not intended to cover the situation where employed managers are candidates for promotion to higher executive positions. Suggestions for the administration of this type of appraisal will be considered later.

Steps in appraisal. There are three essential steps in the initial evaluation procedure. First, the discovery of qualified potential candidates inevitably involves a screening process. Every enterprise has certain minimum requirements for potential managers, and it is less costly to find out, at as early a stage as possible, whether the prospects have any insuperable handicaps. Secondly, persuading qualified men to become active candidates involves selling the firm to the prospective applicant. Finally, each candidate receives an extended guided interview.

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[5] M. L. Mace, *The Growth and Development of Executives* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1950), Chap. 4.

Screening during Recruitment. Initial screening for intelligence, age, and maturity can be readily accomplished during the recruitment stage. Since there is a pressing need for employing only those men with high intelligence, this factor may be examined first. If the recommended candidate is already an employee of the firm or is currently employed by another firm, he might be encouraged to visit the personnel department and take a standard intelligence test. If he is a college graduate, he can usually provide the representative of the company with evidence of intelligence. These candidates should be informed by the company representative that the men who will be accepted must have a superior grade average or score proportionally well on a standard intelligence test.

The factor of age is of universal importance in candidates for managerial positions. Enterprises with good training programs always emphasize the importance of an early start. They can point to the time, one or two years, that it takes to complete a training program. They can point to an average of fifteen years required by managers for the development of their full managerial potential. And they can refer to the "typical" executive in the most successful enterprises, who selected in his early twenties the firm in which his career was to be built. Consequently, it is advantageous for an enterprise to place an upper age limit for managerial candidates at about twenty-seven years. This factor can be readily screened at the time men are recruited.

Enterprise executives look for maturity in managerial candidates. This is an elusive factor that defies objective measurement. It is not even highly correlated with age or experience. The potential candidate will reflect his maturity by the scope of his past experience and present knowledge, by the things he has learned from experience, by his breadth of view, and by the common sense of his objectives and the means by which he proposes to achieve them. Although it is a heavy burden to place upon the recruiting officer, he is in the best position to screen potential candidates for this quality.

Selling the Firm to the Prospective Candidate. The enterprise representative who discovers men qualified in terms of intelligence, age, and maturity should encourage them to become active candidates for managerial positions. These are the people who should be sold on the firm, and there is no reason why the enterprise should shrink from putting its best foot forward in this regard. Indeed, the firm should see to it that this objective is pursued with the same vigor and imagination that it employs in selling its products to customers.

It is for these reasons that the recruiting officer has an extremely important duty to perform. He is the key salesman. His product is the enterprise, its location, size, prestige, prospects, set of incentives, and morale. He is successful when he has persuaded tentatively qualified men to *want* to work for the enterprise. These men are then encouraged to complete an application form at their leisure and to appear for an extended interview *on a given date.* It is as important to set a date immediately for the interview as it is to ask a buyer for an order!

Interview Requirements. Qualified candidates are those who have successfully passed the screening accomplished during recruitment and on the basis of information carried by the application form. These men are ready to be interviewed thoroughly and extensively. The officer who carries the responsibility for this phase follows approved interviewing procedures. When this stage has been completed, the interviewer is ready to pass along the candidate to other managers on a prearranged schedule. The smooth operation of this technique reflects good planning and a respect for the value of time to all concerned.

Factors in the appraisal. The specific characteristics suggested for evaluation are listed in Figure 16. The reasons for selecting these particular elements were developed in the preceding chapter. The interviewer is searching for those factors which will be of most benefit to the future manager in carrying out his duties. The simplicity and effectiveness with which these characteristics may be measured are considered in succeeding paragraphs.

Intelligence. The determination of the candidate's intelligence can be quite a simple matter. If he is a graduate of a university known for its high standards, the transcript of his record will provide the requisite information. In case of doubt about the reliability of the grade index, the prospective employer should administer his own test.

Breadth of Interests. The transcript of the candidate's college record and the interview itself are the most effective means for determining the interest that the applicant has in areas of subject matter foreign to the particular business of the prospective employer. The interviewer can inquire into the way in which the candidate employs his spare time, with a view to assessing the breadth and depth of his nonvocational interests.

Thinking

Analytical Ability. A successful method of determining the facility of the candidate with scientific methodology is to assign him a problem and ask for a report, limited in length, relating to his method of procedure. The problem should be one that does not require technical knowledge. It may relate to a feud between inspection and production, scrap losses or the lack of scrap in a given department, job analysis, reducing accidents, or similar issues. The interviewer will look for the *logic* of the procedure outlined by the candidate and his care in ameliorating personality conflicts. These factors will reflect the reasoning ability and common sense of the applicant.

Ability to Communicate. The interviewer can judge the value of the candidate's ability to transmit ideas from his written report on the assigned case and from oral discussion. Both will reflect directly his facility in choice of words, phrasing, sentence structure, paragraphing, and over-all clarity and forcefulness of expression.

Drive. The determination of the candidate's drive is a highly subjective assessment of the information uncovered by the oral interview. It can be worthwhile to inquire into the changing ambitions of the candidate and particularly the extent to which they were pursued. Even greater weight can be given to the plan that the candidate has worked out in order to fulfill his present objectives.

Personality. The search for the characteristic of personality needs to be undertaken with great care. The essential quality to be determined is the impact of the candidate's personality on others. Any broader approach to the issue would scarcely yield reliable results. The widely followed device of passing a candidate around to four or five other managers in order to get their reaction to his personality is satisfactory so long as this is the only factor rated. These interviewers can report quickly by telephone, and a consensus can be readily determined.

Evaluation of Managerial Experience Acquired Elsewhere. Some of the candidates for managerial positions will have had supervisory and executive experience in other enterprises. The important question is whether such experience can be properly weighted in the appraisal process. For instance, candidates for such posts as works manager or sales manager will unquestionably have had previous experience. Can it be appraised? The recommendations of his superiors and the progress of the department or the firm as a result of his accomplishments are pertinent items of information. But they must be sifted carefully, because others may not know what one is looking for in an executive and because any success that the outside firm may have had is quite likely to be a resultant of numerous factors. Any search for reliable data is likely to be both time-consuming and unprofitable. But if reliable information is available, it is definitely worthwhile.

Who shall appraise? Detailed consideration will be given in the succeeding chapter to the important matter of the organization of the management-development program. The person who is delegated the administrative duties is the appropriate officer to undertake the original appraisal. This person may specialize in the management of the program. In medium- and small-scale firms it is unlikely that this activity will require a full-time manager. He may be the manager of production, sales, finance, research, or an assistant to the chief executive officer. He needs to be a man with prestige, who possesses the confidence of the top officials of the enterprise, who can get and retain their active support, who is experienced and judicious, and who understands management and the qualities that facilitate success in this activity.

Limitations of appraisal. The process of appraisal outlined in this section is not without its limitations. It is as important to understand these

MANAGEMENT APPRAISAL FORM

(This form to be used in appraising the managerial potential of candidates for employment.)

POLICY

The future of this company is largely dependent upon its ability to attract, select, and develop personnel with superior managerial potential.

This form, when completed, becomes an important instrument in the selection of our future managers. It becomes part of the permanent personnel record of those who are accepted.

DETAILED INSTRUCTIONS

This form is to be completed by the Director of the Executive Development Program upon the completion of the interview with each candidate.

Read the definition and explanations of each characteristic before selecting the degree to which each quality is possessed by the candidate.

Attention should be devoted to a single characteristic at a time.

PERSONAL DATA

Name__________________________________
Age____________
Date of interview_______________
Interviewed by____________________ Position______________

1. INTELLIGENCE

This characteristic may be determined from the transcript of the college record of the candidate or from the results of an intelligence test. The test should always be given unless the candidate is a graduate of a reputable college or university with a minimum grade point average of "B." If the intelligence test is administered, the candidate must stand in the highest quartile.

Grade point average_____ Graduate of____________ Degree_____
Score from intelligence test_____

2. BREADTH OF INTERESTS

Review the transcript of the candidate's university record for elective courses. Supplement this information by data from interview.

Wide interests are demonstrated by courses taken in art, music, the humanities, etc., and by activity and knowledge in the area of sports, hobbies, travel, etc.

Narrow interests are reflected in a lack of curiosity about other occupations, activities, etc., and by aimless waste of time.

	Wide				Narrow
CHECK ONE:	☐	☐	☐	☐	☐
	5	4	3	2	1

Fig. 16

3. Ability to Make a Logical Analysis:

Require the candidate to write in 200 words a procedure for handling a problem of the following type:

Case: The plant manager of a certain company is disturbed by reports of high scrap losses in Department D. He selects you to investigate and report. What would you do?

Evaluate the report, noting particularly the source and extent of the data, the analysis of the data, the hypotheses developed and tested, and the conclusions reached. On this basis indicate your judgment of the facility possessed by the candidate with scientific methodology.

Check One:

High				Low
☐	☐	☐	☐	☐
5	4	3	2	1

4. Ability to Communicate:

Evaluate the candidate's facility with language both from the written report on the case above and from the interview. Note particularly errors of grammar and spelling, choice of words, flow of words, and ability to maintain interest.

Check One:

High				Low
☐	☐	☐	☐	☐
5	4	3	2	1

5. Drive:

Arrive at a tentative estimate on the basis of the interview. Check particularly the successive ambitions of the candidate, the method of attaining them, and evidences of initiative.

Check One:

High				Low
☐	☐	☐	☐	☐
5	4	3	2	1

6. Personality:

Make appointments with at least four managers of different departments in the firm for the purpose of meeting the candidate and evaluating the impact of his personality. Have each manager report his estimate on a scale of 5 and indicate the consensus on the scale below.

Check One:

High				Low
☐	☐	☐	☐	☐
5	4	3	2	1

Fig. 16 (*Cont.*)

as it is to understand the positive promises that the suggested program embodies. Only in this way may considered judgment of the value of the procedure be reached.

First and foremost is the danger that the wrong man may be selected to make the appraisal. He may not possess the skills required of interviewers, because of a lack of experience, shortcomings of personality, or an inability to integrate the purposes of the candidate with those of the firm. He may fail to keep up with new knowledge in interview techniques. He may be careless. Through rush of other duties or through a lack of respect for the candidate, he may permit interruptions, and he may fail to give the applicant a full opportunity to express himself. Finally, he may be unable to obtain the cooperation of other managers in evaluating the candidate's personality. This shortcoming can result in too few estimates made by other managers and much wasted time for the applicant.

Second, several characteristics are measured subjectively. This is particularly true of drive and personality. It is unfortunate that there are no objective measures for these factors. But since they are of overwhelming importance in any manager, serious effort should be made to evaluate them. Hence, it is necessary to fall back on the judgment of the interviewer and on a consensus.

Subjective evaluation is a fault, however, that should not be weighted too heavily. Many of the most common decisions are based on subjective evaluations. The things people buy, the women they marry, the prestige attached to persons and locations, the quality of educational institutions, and the life beyond the grave are evaluated in this manner. The student may view with respect, therefore, the skilled interviewer's evaluation of a candidate's drive and personality.

Appraisal of Supervisory Personnel: A Suggested Program

Supervisors versus upper-level executives. Supervisory personnel are often relatively new men. They may be foremen promoted from within, newly hired men from other firms, or newly employed and trained college graduates. Little or nothing may be known about how a person will conduct himself when supervising subordinates. Consequently, the appraisal procedure should be devised in such a way as to elicit information about three important factors or elements: evidence of leadership ability, quality of performance, and evidence of good judgment.

Initial versus routine appraisal. Initial appraisal is concerned with the evaluation of candidates who have had no managerial experience in the particular firm. These are the men who are employed in a nonsupervisory capacity, men who have had employment with other enterprises, and the college graduates who are ready to begin their careers. The appraisal procedure for these candidates is designed to determine the degree in which each person possesses characteristics that will facilitate the successful accomplishment of the managerial functions. Initial appraisal is personal appraisal.

For want of a better word, routine appraisal relates to the periodic evaluation of all the managers in the firm. This procedure is applicable to every person, from foreman to president, who is building experience in managerial capacities. The fact that experience is being accumulated is most significant. Enterprises want results. Consequently, routine appraisal procedure is designed to evaluate managers on the basis of their performance.

Evaluation of supervisors. Supervisory personnel are appraised by their immediate superiors. This duty requires a great deal of time and unusual care if it is to be done right. A standard form[6] such as is suggested in Figure 17 should be provided for the purpose. The selection of the factors appearing on this form is a vital matter. Enterprise practice varies between a listing of too few elements to reflect the quality of the job being performed and too many factors. The latter fault finds expression in forms that list as many as ninety-eight categories! In such instances there is bound to be serious but uneven overlapping reference to phases of performance, as well as the creation of an insurmountable job for the appraiser.

The factors to be appraised are explained in sufficient detail in Figure 17, so that there is little reason for misunderstanding them. The over-all evaluation, however, calls for some question, since it quite obviously is an overlap. It is included as a concession to human frailty. Every experienced manager uses a hunch factor. What is really in the rater's mind is the question: How well will he fit into the operation? The supervisor's performance can be rated without adequately covering this element. This factor is included so that the rater has an opportunity to visualize the future of the subordinate.

Each factor in the performance rating calls for a five-step discrimination. On some forms, enterprises often explain to the rater just what each figure in the evaluation scale means. For instance, in the case of the judgment factor the several qualitative rating columns might contain the following phraseology:

Unsatisfactory:	Judgment too poor to retain in the job without improvement
Fair:	Decisions not entirely adequate to meet job demands
Good:	Makes good decisions in various situations arising in the job
Very good:	Superior in determining correct decisions and actions
Exceptional:	Judgment always reliable on important and complex matters

Similar explanations may be made for all the other factors.

The inclusion of alternate boxes in the three middle columns permits a degree of flexibility upon which many conscientious managers insist. On the other hand, they force the rater to make more decisions than he otherwise would have to reach. This feature of the rating form may well be adjusted to the preferences of the managers concerned.

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[6] This form reflects to a considerable degree the practices of the Radio Corporation of America.

A final point in connection with the evaluation of supervisors concerns the importance of rating the subordinate's performance with respect to his job description. This point is exceedingly important. It is altogether too common for a manager to have in his mind a hazy and sometimes variable concept of what the supervisor is supposed to be doing. Quite clearly, no accuracy in evaluation can be achieved unless the manager adopts the practice of placing the job description for easy reference beside the rating form. If this document does not exist or if the supervisor does not have a copy, it is obvious that the time spent on the consequent pseudo rating is entirely lost.

MANAGERIAL PERFORMANCE APPRAISAL

(For use in appraising all employees who occupy positions involving supervisory activities.)

Policy

It is the policy of this company to seek out those managers at all levels in the organization who have undeveloped potentialities for undertaking increasingly responsible executive positions, provide opportunities for development, and promote them to positions where their potential will be fully utilized.

Detailed Instructions

This form will be completed twice each year for each subject employee, and it will represent the consensus of the immediate superior, the Director of the Executive Development Program, and one member of the President's Committee on Executive Development.

Consider the man's performance in his present position.

Consider only one characteristic at a time.

Prepare notes for the discussion interview covering outstanding abilities, areas needing improvement, and specific plans for development.

Personal Data

Name______________________________ Date____________
Present position________________ From____________________
Previous position________________ From__________ To__________
Appraisal by:____________________ Position________________
____________________ Position________________
____________________ Position________________

Definitions

Exceptional:	Employee's performance approaches the best possible for the job.
Very good:	Employee's performance exceeds the normal requirements for the job.
Good:	Satisfactory performance of the full requirements of the job.
Fair:	Performance is below the requirements of the job and must be improved if the employee is to avoid transfer or separation.
Unsatisfactory:	Performance is completely inadequate. Employee should be transferred, demoted, or separated.

Fig. 17

Rated Factors	Unsatisfactory	Fair	Good	Very Good	Exceptional
1. Performance of the group supervised: Amount and effectiveness of the group accomplishment.					
2. Control: Extent to which supervisor keeps cost, personnel, equipment, and other factors reported in control forms at a minimum consistent with effective performance.					
3. Planning ability: Effectiveness in planning the work to be accomplished both by the group and by the supervisor.					
4. Leadership: Ability to motivate subordinates in the interest of the firm, and to achieve effective coordination in their efforts.					
5. Judgment: Extent to which decisions and actions are based upon sound reasoning and the weighing of prospective results.					
6. Development of subordinates: Ability to utilize the potentialities of subordinates, and to develop men for more responsible positions.					
7. Initiative: Extent to which supervisor is a "self-starter" in seeing things to be done and in doing them without prodding.					
8. Dependability: Extent to which supervisor can be depended upon to carry out instructions, be on the job, and fulfill his duties on time.					
9. Job knowledge: Extent of information about the job, understanding it and its relationship to other activities of the firm.					
10. Personal efficiency: Speed and effectiveness in performing duties not delegated to others.					
11. Over-all evaluation: Adequacy of the total performance of the supervisor and the degree to which he fits into the total operation.					

12. Promotability: Supervisor is promotable now. ☐
Supervisor will be promotable in 6 months. ☐
Supervisor will be promotable in 1 year. ☐

Fig. 17 (Cont.)

Review procedure. It is important to require that every rating be reviewed by the appraiser's immediate superior. The mere fact of review will act as a powerful stimulant to careful appraisals. If there is a chance that the rater will be called upon to justify his decisions, there can be little doubt that he will make a studied effort to be judicious and consistent, both with respect to the several ratings of the same subordinate and with respect to all his subordinates. The quality of the job that the rater does will itself be an important factor in the subsequent appraisal of himself.

A second important feature of the review concerns the promotability of the supervisor. The appraiser and his superior discuss the merits of the subordinate from the viewpoint of his candidacy for future promotion and agree upon the probable time that the individual will be ready to move up. This is an important feature of the appraisal process because it is basic information for the development of the manager inventory.

A third advantage of the review procedure is that the appraiser's superior will always be in a position to recommend candidates for new assignments from among subordinates in his own division rather than give first preference to outsiders. Any manager is derelict in his duty if the opportunity is foregone to improve morale by taking care of his own first if they are of equal ability to those outside his department.

Review of the appraisal with the supervisor. Review of an appraisal with the person whose performance is being evaluated is an important requirement of a good procedure. It greatly improves the quality of the rating. The superior who knows that tomorrow morning he will have to go over the evaluation with the supervisor will exercise a higher degree of discernment in selecting the particular description of the subordinate's work. He will not be able to take the easy road of upgrading the several characteristics for several reasons. His own work will be reviewed by *his* superior, the new rating will be compared with old ratings for consistency, and the grading level of many appraisers will be compared.

There are also benefits to the supervisor. He will know where he stands with his superior. He can get a clearer view of his job. His strong and weak points will be pinpointed. He will know exactly what he must do to keep his job and to qualify for promotion.

For the interview with the supervisor a form comparable to the one suggested in Figure 18 serves two important ends. It provides the basis for a guided interview so that the subjects that need to be covered will actually be the basis of the discussion. It also provides a permanent record, showing the supervisor's exact job at the time of the interview, his outstanding accomplishments, his area of weakness, what he has been doing about the weaknesses unveiled in the previous rating, the specific suggestions of his superior for improvement, whether the superior believes that the supervisor is assigned to the right job, and an acknowledgment by the supervisor that the rating was discussed with him.

RECORD OF RATING REVIEW WITH SUPERVISOR

1. State the exact job held by the supervisor at the time of rating.
2. Has the supervisor any outstanding accomplishments to his credit? Any unusual abilities?
3. What improvements should the supervisor make in his present job?
4. What is the supervisor doing to improve himself?
5. What suggestions does the reviewer have for helping the supervisor in his present job? future job?
6. Is the supervisor assigned to a job that fits his abilities? If not, what should he be doing?
7. As a result of the discussion, list the immediate steps or plans you have agreed upon for the supervisor's improvement.

Signature of rater date

Signature of reviewer date

The above rating was discussed with me.

Signature of supervisor date

Fig. 18

Frequency of rating. There are several advantages derived from rating supervisors twice a year. They are at a critical stage in their careers. Many will be undergoing their first supervisory experience. Others will be ready for promotion. The new men will be mainly concerned with ways and means of improving their operation, and for this purpose frequent formal rating is of inestimable value. The more experienced will have had the time to take the advice received in previous discussions with a reviewer, and their new ratings will show the result of applying the prearranged plans for improvement.

Factoring the appraisal. From an administrative point of view, matters would be considerably simplified if it were possible to factor the appraised characteristics of the supervisor's performance. This process would involve assigning measurable values to each quality of the performance and summing the earned values for purposes of quick reference or grading.

Although factoring has been widely attempted, there is no known instance of its proved practicality. It is generally considered unworkable because of the extra decisions the rater must make, differences between raters, the tendency to concentrate on the total figure rather than upon the elements of performance, and the incongruity of attempting accurate measures of performance that admits of no accurate scales. For, no matter how painstaking would be the factoring procedure, it would still not give a more accurate answer than the original data permit.

Appraisal of Middle- and Upper-level Managers: A Suggested Program

The appraisal of middle- and upper-level managers, although similar in many regards to the evaluation of supervisors, may be distinguished from the latter with respect to the purpose or objective to be served, the qualities of the men who are appraised, the factors to be evaluated, and the size and prestige of the appraisal committee.

Purpose. The viewpoint of those who appraise middle- and upper-level managers is quite different from that which guides those who evaluate supervisors. In the latter case, the men are weighed in terms of those factors that are important in the management of a minor activity of the firm. The point of view of those who evaluate upper-level managers is much more broad. Their objective is the identification of those qualities that are valuable to senior and general officers of a firm and the uncovering of specific weaknesses.

Qualities of the candidates. The men who occupy middle- and upper-level positions with a firm are clearly distinguishable from those who are front-line supervisors. They have demonstrated their ability to operate a small department efficiently. The growth of their leadership ability has been noted and weighed. And they have given evidence that they have a potential for considered judgment in handling issues. That is the raw material for further management development. Consequently, appraisals of their performance in middle-level appointments can veer away from the emphasis on operating proficiency and concentrate on those qualities demanded in the profiles for senior-executive positions.

Factors to be evaluated. It is a noteworthy fact that, as a man progresses upward in successive managerial positions of the organization structure, the way he spends his time changes. At the front-line level he is almost exclusively concerned with internal operating problems. Even his contacts with other departments are very limited. With successive promotions this environment gradually changes. An increasing share of the manager's time is taken up with committee work and interdepartmental dealings. When the level of senior executive has been reached, perhaps half or more of the manager's time is devoted to dealings with employees, customers, and the community. There is a growing sense of external social responsibility. And at the general officer stage, the impact of external affairs is even more noticeable.

These circumstances have an important bearing upon the qualities in a middle-level manager that need to be appraised. He needs experience in discharging various types of duties, which are largely external to the firm. These may include labor-union negotiations, trade-association activities, community affairs, governmental contracts, and foreign assignments. Representing the firm in its external relationships is a highly responsible job. It requires, more than any technical knowledge, a high degree of leadership ability and mature wisdom. The candidate who is promoted into the middle-level management group is not equipped for these duties. But the successive appraisals will show what near-term objectives should be striven for and the particular assignments of duty that will gradually provide the essential experience for growth.

Not only do the types of factors that are used for appraisal purposes differ considerably from those suggested for supervisors, but there is also a qualitative difference. Actual measurement of accomplishments becomes more and more difficult the higher the position of the candidate. There are no objective standards for measuring improvements in the quality of leadership and in the refinements of an emergent wisdom. As a consequence, the men who appraise have few guides. The only safeguard against personal prejudice and injustice is the broadened committee on appraisal.

The appraisal committee. The nature and the importance to the firm of a correct appraisal of middle- and upper-level managers suggest that the committee for evaluation be composed of several superiors of the candidate. This group will, of course, include the immediate superior of the candidate and his superior once removed and should be augmented by two to four other superiors. They may or may not have come into contact with the candidate. Those who do not know him are often valuable "devil's advocates," who can get answers to pertinent questions.

As in the case of supervisors, the completed appraisal should be reviewed with the candidate by his immediate superior. Every man will thus learn where he stands and what is expected of him and will be encouraged to overcome his deficiencies. The enterprise gains because its promotable men are known, they are given assignments determined by their needs rather than haphazardly, and the risk of poor future management is minimized.

Factors and Their Weighting

The mere selection of certain characteristics that influence the quality of the managerial job involves an assumption that should be made clear. There is a difference, though often obscured, between managerial and enterprise success. The standards of success which are often applied in enterprise run in terms of profit and relative position in the industry. These results may be due to entirely fortuitous circumstances.[7] Managerial success, on the other hand, is related to the skill with which an executive carries out his functions. Consequently, there is little reason to expect this skill to vary with environment, stage of the business cycle, or the rise of trade unionism.

Relation of the factors to success. In order to be meaningful, managerial success should be explained in terms of the skill with which the principles of business management are applied. Defined in this way, the issue becomes: To what extent does success depend upon the appraised characteristics? For instance, can a manager be successful without facility in one or more factors? There is plenty of evidence from business experience that suggests that managers vary considerably in the degree to which they possess the specific factors that logically contribute to a high standard of performance. How should this fact be interpreted?

It may be suggested, first, that managers, knowing of a weakness in, say, facility of communication, compensate for this deficiency by the excellence with which other qualities are exploited. Men who have difficulty in transmitting their ideas may be held in high esteem for their proficiency in planning, organizing, and picking successful lieutenants. The second way to look at this issue is to visualize managers graded according to their score on all qualities. The essential logic of this view is appealing because the normal expectation is to find managers at the bottom of the scale who are deficient in several qualities and who may be strong in none.

No systematic study of this matter has been made. The explanation of the continued existence of the poorer managers rests upon the quality of competition and fortuitous circumstances. The quality of competition is a real force. It is possible to classify whole industries in terms of the foresight, creativeness, and intelligent vigor with which the enterprise managers guide the firm. Such a classification might list chemicals, electronics, and plastics at the top and the dying industries at the bottom. All the managers in the latter group may be characterized by "competitive deficiencies" in executive qualities. Competition often fails to drive out the poorly managed firm when all of the firms in the industry are poorly managed.

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[7] For some amusing circumstances, see Charles W. Morton, "Successmanship in Management: How to Get By in Business with Nothing on the Ball," *Atlantic Monthly*, vol. 190, no. 2 (August, 1952).

Many illustrations may be cited to show that fortuitous circumstances sometimes retain inefficient managers in a firm and even create for them a reputation for astuteness. Riding the upward swing of the business cycle can make poor men look good. The top manager who gains a high reputation as a success despite the fact that he violates all the principles of management probably owes everything to able but anonymous subordinates in key positions.

Varying degrees in which candidates possess the factors. The normal expectation is that candidates for managerial positions will be found to possess the several qualities or characteristics in varying degree. The individual firm is interested in securing men who score well in all factors. If the number of men who qualify on this basis is adequate, there clearly is no problem. But actual experience indicates that something less than the optimum number of well-qualified candidates will be encountered.

A deficiency in a particular characteristic may be dealt with by prescribing certain experience or course of study. For instance, deficiency in the ability to communicate in writing may be overcome by recommending a specific course of study. On the other hand, a deficiency in personality may well be looked upon as insuperable. Furthermore, low scores on two or more characteristics may also be a handicap impossible to overcome.

Relative weighting of the factors. The relative weights that may be assigned to the several factors is a matter of considerable importance. If the several factors are regarded as of equal value to the future manager, the weights will, of course, be the same, and the problem need not arise. The present state of knowledge about the qualities that are known to make for executive success is so fragmentary that the cautious firm may decide that the better plan is to ignore discriminatory weights.

There is an opposite view that may be taken. The executives may analyze their firm from the point of view of its progressiveness, the necessity to maintain good relations with large-scale customers or the government, and its technical problems. If they feel the firm needs well-rounded managers, they may decide against discriminatory weighting. But if the firm's future depends largely upon its success in getting government orders, they may decide to weight more heavily the factors of intelligence and personality but to caution candidates that their careers will be jeopardized by known deficiencies.

Consideration of these matters opens up the question whether the several factors should receive different weights by firms in different industries. Should a university weight the factors in the same way as a manufacturer, a firm engaged in selling transportation service, a department store, or a hospital? At the present time, any answer would be purely speculative. In fact, there would not be any reason to raise the question if good managers were plentiful. The question is pertinent solely because enterprises are forced to take potential managers who are more or less deficient in some characteristics.

Importance of validation. In the preceding sections several problems arising from the selection and weighting of managerial characteristics were considered but left unsolved because the answers are not available. In each instance, what is needed is validation. This is the process of determining the degree to which each factor influences managerial success both in general and within a particular firm. A great body of experimental evidence needs to be collected and evaluated. It is safe to say that, until such a program is completed, no one will be able to tell with certainty the degree to which intelligence, analytical ability, and the other factors influence the success of a manager. Nor can this program of validation be brought to a quick conclusion. Its very nature requires systematic procedures over a long period of time in a wide variety of enterprises.

In the absence of an organized and centralized approach to validation, the individual program director can always begin to develop his own data. This approach is more promising than centralized effort, because the individual firm can undertake a systematic recording and correlation procedure at little expense to itself.

SELECTION OF MANAGERS

The simplicity of the selection procedure is almost anticlimactic in comparison with the complications involved in the appraisal process. On the other hand, those enterprises that fail to follow a systematic and intelligent evaluation procedure applicable to candidates for managerial positions will view the hazards of selection with a great deal of misgiving. These are the enterprises whose managers bewail the lack of objective, validated measures, who assert that selection is a pure guess, or who joke about the matter in an effort to hide their own ignorance.

Array of candidates. The manager who is assigned the duty of selecting one or more men from among a group of appraised candidates will arrange the latter in an array. In the case of selecting trainees it is possible to utilize the net score made by each applicant on his appraisal form. In the case of selecting a man for promotion to some vacancy the several appraisals of his past performance and improvement record will form the basis for arraying the best qualified.

Selection of trainees. Although details of procedure will vary, depending upon the degree of formality of the executive-development program, the actual selection of a subordinate from among a group of approved candidates *always* rests with the superior in question. Any invasion of this right weakens the authority of the manager and decreases his responsibility for the execution of departmental activities. Consequently, the candidate is obliged to sell himself to his future manager.

Selection of an outside candidate. In the event that a firm is forced to recruit candidates from the outside, it is important that the evaluation procedure be faithfully undertaken. Too often there is a gross letup in standards, and carelessness creeps in on the tail of the excuse that little can be known for sure. The candidate from the outside should be carefully scrutinized in accordance with the same procedure that is used in evaluating trainees and current managers.

In one respect the outside candidate will suffer in the comparison with internal candidates because little will be known about his performance elsewhere. Recommendations and reports are poor substitutes for an actual appraisal of observed performance. Only where the record of the outside candidate is superior by a wide margin is he likely to receive an appointment.

Selection of candidates for promotion. Employed managers who are candidates for promotion are selected on the basis of their performance record, availability, and the choice of their future superior. The use of standard forms for evaluating the performance of managers at all levels facilitates the development of a list of candidates. The basis for such a list is the management inventory, discussed in the succeeding section. Sometimes it is necessary to give attention to a candidate's availability. In general it may be assumed that qualified candidates will always be available in a well-managed firm. The top candidate may, however, be on loan to the government, may be on an assignment elsewhere in the world, or may be in the armed forces.

Assuming that the qualified man is available, his promotion is a matter of deep concern to several superiors. His immediate boss, who may dislike to lose a good subordinate but feels that he could not hold him anyway, is obviously concerned. The director of the staffing program, too, has a personal interest in seeing that good men are promoted.

Internal promotions, especially those from middle to top level in the organization structure, are matters of deep concern to the enterprise, leading usually to the development of a selection committee. Whether formally composed or not, such a committee, working in conjunction with the prospective superior of the successsful candidate, will look into all phases of the performance of candidates. Their habits, social groups, contributions to political and welfare organizations, wisdom in selecting West Knob Hill for their residence, and their wives' qualifications may all be important elements in the final selection.

MAINTENANCE OF THE MANAGER INVENTORY

The full value of the appraisal process cannot be realized unless the enterprise develops and maintains an inventory of promotable managers. Such an inventory is really a talent bank, containing the names of men who are qualified for promotion to a specific list of positions. The enterprise that manages its staffing functions properly will avoid the frantic search and the bad appointments possible without such an inventory.

Route of promotion from specific positions. The firm that would develop a manager inventory recognizes that the first step involves the clarification of the promotion route from any given executive position. It is a rather common view that the promotion steps for a given person consist of successive appointments through each level of the line organization structure. In accordance with this view, the newly hired supervisor of salesmen in a branch office may be told that his line of promotion is through the successive jobs of branch manager, division manager, sales manager, and president. Or the new foreman may be told that any promotion that he earns will take him successively through the positions of the general foreman, plant superintendent, works manager, production manager and president. Information of this sort is both false and grossly misleading.

The appropriate steps should be determined in an entirely different way. Each managerial position should have its corresponding profile chart, which specifies the minimum qualifications required of any candidate. In addition, the appraisal reports on every manager in the firm should, where feasible, be converted to punched cards. Thus, when a man is needed for a job the superior can conveniently request the records of all men who qualify on the basis of the job profile.

Many advantages flow from this procedure. It specifies the sources of candidates whenever an opening occurs. It broadens the internal competition for managerial positions, as a result of which the enterprise may be expected to obtain superior appointees. It provides a rational basis for broadening the experience of men who have yet to reach their maximum capacity for management. And it provides the basic structure for training the future managers at all levels in the organization structure.

Alternatives for promotable managers. On the basis of the job profile and the current appraisal report the director of the program can develop a promotion table for each manager. This document would include such information as the name of the manager, a list of his past assignments in managerial capacities, the name of his current position, and the list of alternatives to which he may be assigned at the time of his next promotion. Additional information is often added to this promotion table. Most firms will find it convenient to make a record here of the current development plans for the manager. These may include special assignments and representation of the firm before government agencies, in association work, or in welfare and civic groups. It may also include attendance in an executive training course.

Location of manager inventory records. The office of the director of the development program will, of course, keep a central or master record file of past and current data relating to the recruitment, appraisal, selection, and promotion of managers at all levels in the structure. His office can be the source of many supplementary analyses of past experience, including validation.

This desire to centralize the recording processes should not obscure the continuing responsibility of the individual manager to keep on top of the staffing function in his own department. One of his duties is to have the best men on the job and to see to it that each, including himself, develops capable successors. Such a duty can be facilitated by the maintenance of adequate data relating to the present job holders, their probable successors, and their avenues for future training and promotion. For these purposes the individual department head can obtain from the director of the program all the data that he requires. These would include, for each incumbent, (1) a record of his past assignments and future alternatives; (2) the appraisal records of his past performance and his readiness for promotion.

On the basis of this information each manager is in a position to discharge his personal responsibility to his superior, to the firm, and thence to society for the selection and promotion of able men. This is a heavy load to carry, but as P. F. Drucker has said, "From an over-all point of view, the ability of an institution to produce leaders is more important than its ability to produce efficiently and cheaply." [8]

SELECTED REFERENCES

Barnard, C. I., *Organization and Management,* Chap. 8. Cambridge, Mass.: Harvard University Press, 1948.

Dooher, M. J., and V. Marquis (eds.), *The Development of Executive Talent,* Chaps. 1–6. New York: American Management Association, 1952.

Hooper, F. C., *Management Survey,* Chap. 6. London: Sir Isaac Pitman & Sons, Ltd., 1948.

Mace, M. L., *The Growth and Development of Executives,* Chaps. 1–4. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1950.

Riegel, J. W., *Executive Development,* Chaps. 5–9. Ann Arbor, Mich.: University of Michigan Press, 1952.

[8] Drucker, *op. cit.*, p. 128.

17

MANAGERIAL TRAINING

Managerial training is both a costly and widespread phenomenon of modern business practice. It is peculiarly a recent undertaking: in the days before World War II, when management was not clearly understood, the generally accepted viewpoint was that somehow or other men acquired by osmosis whatever it took to be a manager. Given sufficient exposure to practical experience by starting from the humble jobs made so famous by Horatio Alger and *Pinafore's* Sir Joseph Porter, the man who was destined to rise to high managerial position was thought to be marked in some fashion easily distinguished by his superiors, who saw to it that he was put through the fires of nasty jobs and fierce trials to be properly chastened by the time he advanced to positions of great trust.

This dream-world of the business tycoon was rudely shattered in the depression years of the 1930s. Executives lost their aura of omnipotence. Probably for the first time in history they began to question their smug views about business success and, by the time World War II was upon them, had decided they needed help fast. The answer was training at the foreman level. At the middle and higher levels, men were simply assigned responsible jobs with a prayer that nothing too disastrous would happen. The lessons learned from these experiences were considered so valuable that the idea that managers possessed a skill different in kind from anyone else's and one which could be taught took firm hold. By 1954 training was at a critical stage. Although management development was making further inroads in enterprises heretofore firm in their skepticism, it was being reexamined with a critical eye by its early adherents. The conclusions seemed to be that considerable value from training had admittedly been obtained but that the achievement of it had been marred by the inevitable barnacles of fad and ignorance.

The Problem of Managerial Training

One of the vital issues facing executives of every enterprise concerns the prompt availability of qualified men to succeed those who occupy managerial posts. Good executives look to the future. They know that civilization itself depends upon the quality of enterprise managers. It is no great step to relate this basic truth to the responsibility of the individual firm to make certain that it has the men with the requisite potential to contribute their full measure to the welfare of the firm and of society.

Reasons for a managerial training program. A managerial training program is justified by its contribution to the development of skilled managers. Few would dispute the fact that executives do not just "happen" to be ready and available when needed. Among the techniques necessary to cultivate a supply of good executives is training.

The ultimate objective of training is to develop men in whom others have confidence. Stockholders and directors want a president who can be relied upon to guide the firm in the best interests of the owners. Subordinates of the president want a man they can trust. This yearning is one that is deeply embedded in man and beast, representing a desire to shift personal responsibility to the shoulders of others.

Confidence rests upon the security which men of judgment can provide. Wisdom itself is a resultant of several forces. The wise can generalize from an analysis of past experience and base decisions on emergent principles. Managerial training is an effort to provide knowledge and experience, an integral part of the material needed for the development of judgment. Indeed, the knowledge and experience acquired in educational institutions and practical pursuits are the whetstones upon which natural intelligence is sharpened.

Managerial training is properly viewed as a complex process. The raw material is the man with high intelligence and leadership ability. To these qualities the educational institution can add facility in communication, breadth of interests, and ability to use scientific methodology. Finally, the business firm, the government bureau, and other social organizations can provide opportunities for broad practical experience in work situations.

Levels of training. It is rather typical of the management literature to emphasize excessively the foreman and junior-executive training programs. References to the training of middle-level and superior managers are extremely rare. Such careful drawing of distinctions seems to be based upon a lack of understanding about the nature of the firm's contribution to training. If the premise is accepted that it is the duty of the firm to permit the manager to acquire experience, then the essential unity of training programs may be understood. Regardless of the different needs of men, the common element in training at all levels must be the exposure to and the evaluation of experience with practical issues.

Foreman Training. The point was made in Chapter 16 that the source of foreman personnel is the work group. This fact has special significance in training for foremanship. The selectees from this source are often not college-trained men but have acquired considerable experience from their work situations and most frequently have developed a high degree of personal skill in specialized operations. And they possess a considerable degree of enthusiasm, ambition, and native intelligence.

Men with these qualifications need training of a type that will fill in the areas of knowledge and experience to which they have not yet been exposed. It is important that they develop some facility in scientific methodology and in communication, that they understand the principles of coordination, that they learn the techniques of leadership, and that they acquire considerable knowledge about the firm, its policies and objectives, its organization structure and authority relationships. Information about the job is equally important, and it is the duty of his superior to acquaint the appointee with this phase. Company rules, regulations, and procedures will weigh heavily with the new man until they are mastered. His authority to hire, fire, and otherwise discipline subordinates must be made clear. His heavy responsibility for teaching subordinates needs to be stressed. Similarly, he needs to become acquainted with the work load of his section, his budget, his controllable expenses, and the controls over his operation.

This is a rather formidable mass of information to be acquired and is the reason why training is a very complex and time-consuming process. It is quite obvious that the preparation of foremen for their job should be undertaken with a sober realization of the scope of the training required, the time over which it must be spread, and the cost of this training. Approaches that are haphazard, lackadaisical, careless, or opportunistic can result in heavy costs.

Junior-executive Training. Junior-executive training has gradually come to mean the preparation of college graduates for managerial positions. The level of the positions is broadly reflected in the word "junior." What is meant is that college men will be given a particular type of training prior to their appointment to front-line supervisory positions other than foremanship. The assumption underlying this approach is that the enterprise is looking for future managers and that, if the candidates for junior-level training measure up to their initial assignments, they can confidently look forward to further promotion.

The graduate of a good college who is a candidate for managerial responsibilities brings to the firm certain rather well-defined qualities. He possesses a high degree of intelligence, understands the scientific approach to issues, can communicate fluently, has broad intellectual interests, and wants to be a manager. Since he will have an obvious deficiency in knowledge about the firm and in practical experience, any training offered to him should be directed toward these areas.

The first part of the training is comprised of activities to acquaint the candidate with the firm. He should know about its history, its place in the industry, its objectives and policies, and its organization structure. If this material is available in written form, the graduate can readily become familiar with it. The second part of the training relates to the work experience to be given the selectee. The presupervisory period is given over to nonmanagerial jobs. Wholesale firms will put the selectee in the stock room to become acquainted with receiving, warehousing, and counter sales. Retailers are likely to place the man in the receiving and marking room. Manufacturers will put him in production or sales departments.

Once the graduate has been appointed to a supervisory position, his training in the exercise of the managerial functions will be emphasized. Basically, the selectee must learn how to get things done through other people. His leadership ability is given special emphasis. Other aspects of his practical experience include planning and assigning work, achieving a condition of coordination, directing subordinates, and getting acquainted with the standards of performance. If there is a formal training program, the selectee may be deliberately routed from one position to another to acquire a broader knowledge about the firm. On the other hand, the lack of a formal plan ordinarily leaves it to the candidate to make certain that his training provides a broad basis for further promotion.

Senior-executive Training. The training requirements of middle-level men who are tapped for senior positions are quite different from those for foremen and junior executives. The middle-level man of promise has many excellent qualities. He has a superior intelligence and has demonstrated a facility in communication, scientific procedures, and other areas of intellectual accomplishment. His work experience has given him an understanding of the *internal* operations of the enterprise. He has demonstrated in many managerial posts that he can plan, organize, select, and train good subordinates, that he can guide them in developing a proficient, coordinated team, and that he is familiar with the control process and is an efficient operator.

Such a candidate, however, needs maturing with respect to the *external* environment of the firm. As a senior executive he will be primarily concerned with managing the relationship of the firm to other firms in the industry, to research and development everywhere in the world, and to government restrictions, regulations, and prohibitions. Knowledge of these matters can be acquired through special assignment to trade-association work, to labor negotiations, to hearings before government agencies, and to the development of official contacts.

These candidates must likewise develop a social philosophy. They require a clear vision of the purpose of society, an understanding of social forces and their integration, an awareness of the prime necessity of society to provide the best available means of satisfying human yearnings, and, above all, an insight into the contribution his firm can make to social welfare. Training here consists of wide reading, special assignments, exposure to the leaders of men in all social paths, and a great deal of thinking. While part of such training can be given in formal university work, most will be informal and will depend upon the candidate's own understanding of his needs.

Variety in training methods. The quick acceptance of the necessity for training has, not surprisingly, resulted in the development of a large variety of training methods. It should be clear that a firm cannot properly start training until it has thought through the objectives to be achieved. All too many firms, however, have tended to shift rapidly from one method to another as poor results become apparent.

Simple Exposure. Perhaps the oldest training method has consisted of exposing the potential manager to the vagaries of business experiences, with the hope that he would be smart enough to recognize issues and treat them proficiently. The protagonists of this method assume that such candidates will develop a facility for locating basic issues, that they will discover the managerial skills and cultivate them, and that their superiors will be able to recognize and promote subordinates who have developed these facilities. The simultaneous realization of all these conditions would be a major miracle.

Formal Training. The executives who believe in formal training do not reject the value of practical experience. They believe, however, that the business experience of candidates should be selective and that it should be acquired after the candidate has been given needed information about his job. The kind of information and the method of imparting it vary widely. The subject matter may be as diverse as knowledge about the firm and its industry, the environment of the job, instructions on how to meet certain issues or how to fill out forms, and an understanding of management principles. The methods of imparting this information may include classwork, either outside or inside the plant, and instruction by outsiders, company officers, or immediate superiors. Practical experience may be limited to a narrow field within a department, as is rather typical of foreman training, or it may provide for various degrees of broad experience through systems of job rotation and routinized progression.

Coaching. Coaching subordinates is, perhaps, the most individualized type of training. It involves a leisurely analysis of past or present issues by the superior and his subordinate, with a view to exploring the reasons for a specific performance and the alternatives that might have been chosen. Such a method requires, on the part of the subordinate manager, all the qualities managers should possess, a desire to act on his own responsibility, and an intuitive sense of timing in seeking guidance. The superior must be willing to delegate authority, take the time necessary to develop alternative ways of handling issues, refrain from telling how a job should be done, exercise patience, and forestall errors in an unobtrusive fashion.

Importance of "Doing." It is exceedingly fortunate that all training methods include an emphasis upon practical experience. The alternative methods vary only in the degree to which guidance is also given subordinate managers. Basically, training will always remain a cooperative activity. Its raw material is the man endowed with intelligence and a yearning to be a leader. His education, whether carried on by specialized institutions or by the firm, develops in him an understanding of the managers' functions and certain other acquired facilities. Finally, he is given an opportunity to use these qualities when he is assigned to supervisory work. The actual practice is the acid test, disclosing whether the candidate has the potential for managing. Only in this stage of his training will there develop evidence that he can lead, that he will profit from his experience, and that he will actively seek further responsibilities.

Present status of training. The American Management Association has recently completed a study of the management development activities of American business firms.[1] A sample of 5,250 or approximately 25 per cent of all corporations with 250 or more employees was selected. Completed questionnaires were received from 1,954 firms and interviews were obtained from 530 additional companies. The firms covered by the questionnaires reported some kind of development plan in 30 per cent of the cases. Of the firms interviewed directly, 48 per cent had plans. The reported activities varied in age from six months to over ten years, but the modal group was between two and three years.

There was some evidence that larger firms tended to be engaged in development activities more than smaller companies. The highest incidence of reported plans was in the aircraft manufacturing industry and among finance corporations. Considering the total number of plans in operation, only 25 per cent were comprehensive in the sense that they encompassed all management levels without limitation. The remainder were restricted with respect to subject matter, functional area covered, or level of management. For instance, one-fourth of all restricted plans were operated only for front line supervisors and foremen.

This picture of the present status of management development plans is actually more flattering than the real situation. As L. F. Urwick, the director of the study, points out,[1a] there was a positive bias in the sample owing to the fact that

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[1] *Management News,* vol. 27, no. 4 (April, 1954).

> almost half the mailed questionnaires were addressed to members of the American Management Association, and 47% of these members replied. Of companies not members of the American Management Association, only 17% replied. Fifty-eight per cent of the corporations covered in the field survey were members of the AMA and were almost certainly those which were known to have taken some interest in the subject; 48% of them had some kind of development plan.

Although business executives now feel a great urgency about managerial development, the present status of training is clearly in an experimental stage. It is important that this feeling of urgency, perhaps whetted by the constant preaching of interested groups, be held in check until the planning phase of a development program can be worked out. The purpose of development in both philosophical and quantitative terms needs to be clarified first. Attention then may be given to the best plan, and the appropriate organization and procedures worked out. Any failure to follow scientific procedure will inevitably result in disappointment, failure, and great risk to the firm.

Features of a Good Program

A discussion of the features of a good program assumes that there will be a program. The firm that does no training and does not intend to do so either has no interest in it, is willing to rely on its ability to attract trained men from other firms, or assumes that men will be trained through overt exposure. On the other hand, the enterprise that is determined to train its future executives will reduce its purposes to a group of policies. These may include general directives to promote from within, provide training at all levels of the organization structure, and centralize the responsibility for training in a top-level staffing committee. On the basis of these or other policies, the features of a good program can be worked out.

Scope. The scope of a training program should be determined by the enterprise needs if the latter are clearly understood. Ideally, every firm requires an inventory of capable managers ready for promotion. Large-scale firms are usually in a position to place those who are immediately promotable. On the other hand, the smaller firms cannot provide such immediate opportunities for trained successors to current managers, who may well be young and in good health. In this situation there is little point in developing promotable successors, since the lack of opportunity will drive them to other firms.

[1a] *Management Education in American Business* (New York: American Management Association, 1954), pp. 29–30.

The scope of a training program will, therefore, be determined by the past experience for managerial replacements, plans for the expansion or contraction of the firm, and specific circumstances relating to the occupant of each managerial position. For instance, the urgency of developing a successor to a newly appointed president in his early forties may be relatively slight, but as this man grows older, the matter will be viewed differently. Matters of health and alternative employment opportunities are so unpredictable that farsighted managers will waste little time before beginning the training of their successors.

One point of vital importance to the scope of a training program is the necessity for training at *all* levels in the organization structure. Probably there are many reasons why so many firms ignore the importance of developing executives for middle and senior posts, while placing a good deal of emphasis upon foreman and other front-line supervisory training. In terms of gross numbers, front-line training is unquestionably important. But the neglect of training for superior managerial positions is a particularly serious deficiency, whether explained in terms of ignorance, carelessness, an unconscionable egotism, or a belief that candidates for high positions just happen. Although importance is a difficult thing to measure, there is little question but that the future of the firm is more vitally affected by the quality of its chief executive than by a foreman. If a firm must choose a training level, it surely should give priority to the superior managers. But this choice is scarcely necessary, for the advantages of developing men at all organization levels are obvious.

Formality of the program. A good program prepares men for promotion as efficiently as possible. Whether it is formal or not is entirely a question of economics. It is the candidate who is being trained, not a standardized robot. Consequently, manager development is tailored to the needs of the person. Certain groups of deficiencies can be best overcome by formalized training. For instance, deficiencies in the ability to communicate, in the logical processes, and in breadth of view can best be overcome by attendance in the formal classes of educational institutions, by industry seminars, or by certain kinds of community work. On the other hand, many skills can best be taught informally by the candidate's immediate superior. These include cost control, the development of subordinates, job knowledge, dependability, personal efficiency, initiative, and leadership techniques. Primarily, the superior will achieve the best results through the coaching technique, although general knowledge about some of these areas can often be most economically transmitted through on-plant group instruction.

A frequently overlooked factor in the formality of training concerns the ability to teach. Although the point has often been made, it is still not sufficiently understood that managers have an important teaching function. Deficiencies in teaching skill, if characteristic of superiors, will result in formalizing a considerable amount of instruction that might better be given by immediate supervisors.

Creation of opportunities for diversified experience. There are many important advantages for the enterprise that provides diversified experience for its promotable managers. It is a means of making certain that the candidate obtains variety in types of problems. The supervisor who is limited to, say, the issues that arise in the shipping room may very well become expert in requisitioning packing materials, requesting equipment, selecting workers from among those sent to him by the personnel department, and routing deliveries. But he will remain ignorant of the issues that face all other sections in the firm.

Diversified experience is the most effective means of orienting the candidate to the interrelationships of departments and the viewpoints held by their personnel. Every firm is plagued with a lack of such understanding. Difficulties arise between inspection and production, between sales and production, between service, staff, and line departments. The quality of being able to understand the attitudes of others toward a given issue is extraordinarily rare in those who have never sat on the other side of the table. Rather than take the position that only those men are promotable who can do this, the wise executive will see to it that his candidates are actually assigned to work in several other departments.

A closely related problem concerns the matter of understanding the people in other departments. Not only are people different, but they are additionally differentiated by their specialized skills. The accountant, engineer, chemist, methods man, and statistician have personalities that are complicated by their narrow viewpoint. The potential manager needs to know and understand these specialists in order to motivate them efficiently. Such understanding comes, not from reading books or listening to lectures, but from working with these people.

Candidates for senior positions from the middle level of managers particularly lack an acquaintance with the external environment. Ability to represent the firm in its dealings with other enterprises, with the government, with foreign contacts, and with the community does not come naturally. It is derived from actual experience.

Finally, diversified experience is a certain means of forestalling the growth of unseemly departmental loyalties. People whose work experience is limited to any department soon develop a sense of group loyalty. In many respects this propensity is good. But there is a point beyond which an overweening loyalty to a department will become harmful to the best interests of the firm, as well as to the development of the potential candidate. In large enterprises it is easy to see the welfare of the accounting department, engineering department, or sales department very clearly but less easy to identify this with the welfare of the firm. Indeed, the latter objective may be so dim and distant that it is forgotten altogether. From such a situation the "honest" empire builder arises. The candidate himself is extremely shortsighted if he falls into such a trap, for his future opportunities will fade rapidly as this disqualification becomes known.

Certain disadvantages accompany any program for broadening the experience of promotable managers. There is the disruption in routine, in personal relationships, and in work assignments as one candidate is succeeded by another. There is the inevitable resistance of the responsible department head, who, having developed a good man, hates to see him leave. On the other hand, these irritations and their obvious cost are small matters compared with the discovery of capable future managers. On this premise, particular jobs may be specifically reserved as training centers for managerial candidates. One very large firm follows the strict policy of filling the position of accounts receivable manager with successive candidates for executive positions and never intends to promote anyone into the job from within the section.

Provision for principle and practice. Managerial training is necessarily a long, drawn-out procedure. Executives are ripened, not in a few months, but in some fifteen to twenty years.

There is an essential interlarding process in the training of managers. The inexperienced college student may fail to appreciate the value of classes in management training. His mind requires the fertilization of practical experience. Only then, after a short period in a supervisory capacity, can he appreciate the need for further training in communication and in logical thought processes. His employer will see to it that such men receive the necessary instruction.

The men who have made good reputations over a period of five to ten years as front-line supervisors or as skilled technicians in engineering, accounting, or natural science may be good prospects for promotion into middle-level managerial positions. The important thing is whether they *want* to become managers. If they do, a good training program will suggest that this is the appropriate time for them to return to school for management training. A few universities offer the type of courses in management principles that will greatly benefit them. Also, the American Management Association operates a large number of workshop courses for a similar purpose. The number of trainees at this level may even warrant the employment of an on-plant instructor.

On the heels of this training, the candidates are ready for diversified experience in a variety of middle-level managerial posts. They are the obvious men to put in charge of purchasing, production control, and similar line positions. From among those who have an outstanding record in these positions the candidates for senior positions can then be chosen. These men will develop rapidly through such special assignments as top committee positions, opportunities to represent the firm in outside contacts, and service as acting managers of functional departments.

Existence of a pool of managerial manpower. From the point of view of the enterprise, it is the prime objective of a training program to develop a pool of manpower capable of succeeding the managers at higher levels. But there are important issues which face the director of such a training program. There is the question concerning the ability of the firm to promote a man when he is ready. It is one thing to train a successor and quite another to hold him. To do so requires a sense of timing that will bring along the candidate at the proper speed and have him qualified when needed.

There is also the contentious matter of deciding how many candidates should be qualified for a given position. The risk of providing only one is much too great for a firm to bear, since the single candidate may leave the firm for any number of reasons, may develop ill health, or may be assigned elsewhere in an emergency. Having three or four qualified persons ensures a smooth take-over but also entails a high cost of training. Unless the enterprise is in an expanding phase, it may lose entirely those who are backstopping the heir apparent.

For these issues there can be no single solution. The director of a good training program needs to use rare judgment to meet the requirements of the firm for promotable men and, at the same time, keep to a minimum the cost of training excessive personnel.

Approaches to Manager Training

Executives who have given thought to the techniques of manager training have displayed considerable ingenuity in devising ways and means of achieving results. Some have relied exclusively on certain favored methods, while others have tended to combine any promising approaches that appear to fit their needs. The analysis of the more prominent techniques that follows is designed to provide the practitioner with a considered view of their merits and shortcomings, so that he may elect one or more as suits the needs of the particular firm. For it is clear that there can be no standardized training program. Each must be tailored to the individual needs of the enterprise.

Planned progression. The technique of planned progression is concerned with blueprinting the path of promotion that lies before the manager who occupies a given position. Sometimes the path is traced through the successive levels of the organization structure within a department. Thus, the foreman may be told that the successive promotions lying before him are to general foreman, superintendent, works manager, and production manager. Or the supervisor in the sales department may be informed that his path of promotion lies through branch manager, district manager, assistant general sales manager to sales manager. This concept is faulty in many respects. It gives an overoptimistic picture to the subordinate, it fails to provide diversity of experience, it encourages undue specialization, and it provides an inferior means of training in the principles of management.

There is, however, a concept of planned progression with proved merit. The committee responsible for developing a candidate for promotion can settle in conference the alternate positions into which a man occupying a given post may be promoted. Thus, three or four positions at the next higher level in a number of different departments may be specified. If this progression *into the next higher level* is worked out for *each* candidate, the immediate alternatives will be clear to the individual manager, and the specific qualifications can be made clear. The advantages of this concept are obvious. The superior who is asked about promotional opportunities will have a definite answer to give. The alternatives are broad enough to provide for needed diversity of experience. The candidate can be informed with some exactitude about the requirements of the next alternative positions and the most appropriate means of achieving them. From the psychological point of view planned progression has the merit of being geared to immediate rather than distant opportunities.

Job rotation. Few terms are as common in the literature as "job rotation," but it is safe to say that few concepts are as misunderstood. In general, job rotation refers to a plan according to which men receive diversified training. But there are various answers to questions concerning what people are trained, why they are trained, and what classes and levels of jobs are involved. Those concerned with the subject seem to have one or more of five potential situations in mind.

Trainee Rotation in Nonsupervisory Work Situations. Firms that confine job rotation to nonsupervisory work visualize the process as one in which selectees for training are assigned to predetermined jobs within a list of departments for a given period of time. At the end of each stage, the selectees are reshuffled among the same group of jobs until all have had diversified work experience. The evident purpose is to acquaint trainees with the range of activities undertaken by the firm.

Assignment to actual work has several advantages. The trainee will learn how to sell, receive and mark merchandise, recruit and interview applicants, read blueprints, and write bills of materials. There are long lists of such jobs which might be selected for their experience value and in which the trainee will quickly earn his way. And he is less likely to create resentment among his fellow workers if the proper precautions are taken.

There are, however, several serious disadvantages to this type of job rotation. The trainee who is being groomed for supervisory work can learn the details of these work assignments in a short time, and keeping him on such jobs for days and weeks will add nothing to his progress. In fact, the actual selection of work for its experience value is extremely difficult. Furthermore, after the trainee has been rotated through the series of jobs, no one can guarantee him a supervisory position. If none is available, the candidate is likely to leave the firm in discouragement. A related issue arises when a permanent opening occurs before the trainee has completed the cycle. Should he accept and thus abjure the remainder of the program? Or should he refuse and take his chances on a later opening? The first alternative fails to achieve the purpose of training; the second raises the risk of losing out entirely. Finally, there is always the question of resentment against trainees. Other employees may be jealous of the opportunity provided for these men; the departments offering the training may object to bearing the allocated salary expense; and others may resent trainees who are thought to take jobs away from the permanent help.

Trainee Rotation in Observation Assignments. A second concept of job rotation envisages the creation of opportunities for trainees to observe a group of department managers on a rotating basis. Its purpose is to acquaint the trainee with the types of managerial issues department heads face and with the techniques employed in dealing with them. For the trainee the chief advantages of this method include the chance to learn what managing is about, acquaintance with various techniques in handling diverse situations, the possibility of "selling" oneself to a given manager, and an improved opportunity to select the type of work one wants to do. The firm, on the other hand, considers that it has developed a pool of potential managers.

But there are disadvantages also. Many department heads feel that the trainee does not know what to observe, that he should not be allowed to watch the decision-making process in so many situations, and that the training expense should not be borne by the department. As far as the candidate is concerned, the chief disadvantage is that there is a great difference between watching and doing. There is a real question whether he will be able to apply anything he may have learned. This concept of job rotation, therefore, while a considerable improvement over the first, still lacks the basic ingredient of practical experience.

Rotation among Managerial Training Positions. A third concept involves the designation of certain managerial positions on the same level in the organization structure as training stations, to be successively occupied by selectees. Although the positions are a regular part of the organization structure of the enterprise and, consequently, bona fide managerial posts, they are filled solely by successive trainees and not by promotion from lower-level jobs. The purpose of this type of job rotation is to give trainees actual supervisory experience in a variety of positions in several departments.

There are two evident advantages of this type of rotation. First, the candidates obtain actual experience in managing a section or department, an important matter since it is the only known means of discovering whether they have leadership ability and potentially good judgment. Secondly, the candidates develop an appreciation of the viewpoints and attitudes of various departmental personnel and acquire, as well, an excellent understanding of interdepartmental relationships.

The disadvantages of any plan to rotate trainees among predetermined supervisory positions include the difficulty of identifying appropriate positions for this purpose, the resentment of subordinates because these jobs are reserved for management trainees only, and the frequent delay in making permanent assignments to those who have completed their training. In deciding which supervisory posts may be appropriately reserved for training purposes, one must weigh the value of the experience to be obtained in various departments and find some post in which the turnover factor would be rather unimportant. How long it will take a new man in these positions to become productive seems to depend upon the degree to which the departmental activities are standardized, the presence of experienced subordinates, and the stability of the operation. The type of posts that would fit well into these requirements would include the supervision of accounts payable, personnel recruitment, production follow-up, and the requisitioning of raw materials.

No matter how much publicity is given to the training program and the jobs that are reserved for training, it seems impossible to eliminate the resentment of qualified subordinates who are passed over when such positions are filled by trainees. The young and capable subordinate is almost certain to leave the firm in protest. And the older subordinate, who would find openings elsewhere extremely scarce, harbors a smoldering resentment against the trainees. Only the routine nature of the operation keeps feelings from flaring openly.

Finally, this type of job rotation suffers from the disadvantage of all pool arrangements. Those who complete their training are anxious to be placed permanently. Disillusion grows greater, the longer the period of waiting.

Middle-level Rotation in "Assistant-to" Positions. There are firms that conceive of job rotation as the process of shuffling managerial trainees among positions of assisting managers in several departments. The advantage for the men involved is the broadening of their experience at a high level in each department. The firm gains from the creation of a pool of trainees for later appointment to department managerships.

As with other types of job rotation, this plan does not solve the difficulties of permanently locating a man whose training is complete. It also creates considerable resentment among subordinate members of the several departments. But the most serious disadvantage concerns the type of training the candidates receive. There is a good deal of difference between being a high-grade messenger and observer and making analyses and recommendations for the managers concerned. Clearly, if the "assistant-to" position involves the latter kind of experience, it is valuable training.

Rotation of Upper-middle-level Personnel in "Acting" Managerial Positions. This plan is closely related to the preceding type of rotation, but it attempts to give candidates actual experience in managing higher-level positions. The men who are rotated are prospects for senior managerial positions. In order to broaden their knowledge about various departmental problems and functions, they are shifted on a regular schedule into positions as acting heads of departments. The vacancies they fill may occur because of vacation schedules, special assignments of the regular head, illness, or other factors. Upon completion of the tour, the candidates are promoted, returned to their original post with instructions to await developments, or informed that they have failed to measure up to the requirements for a senior appointment.

Besides the normal disadvantages of delays in permanent appointment, disappointment that no further promotion is available, and envy among those not selected, there is another limiting factor in this type of rotation. It concerns the normal human failing of not caring adequately for the interests of the department in which temporary assignments are made. This may appear to be a strange thing to the ambitious but uninitiated. But persons who are assigned for a six-month period may either delay making necessary decisions, through fear, carelessness, or lack of interest, or may make them cavalierly because they will not be around when the results are counted.

Creation of "assistant-to" positions. The "assistant-to" position, frequently used as a training device, permits the candidate to broaden his viewpoint, by exposing him to many areas of managerial policy. This training technique is by no means a routine one. The position itself is specially carved out for training purposes and is often eliminated after it has served its purpose. It is created at a level and in a department that offers the particular experience the candidates should have.

The advantage of "assistant-to" positions from the viewpoint of the superior is that he can most satisfactorily exercise his function as a teacher. The training period can be tailored to the assistant's needs. Assignments may be made increasingly to test the subordinate's judgment. Facets of his experience that need buttressing can be filled out by carefully chosen assignments. Finally, the assistant's decision making and his leadership ability can be tried in selected cases.

The disadvantage of this type of training procedure becomes apparent when the superior executive fails to teach properly. If he lacks understanding of the assistant's needs, if he is authoritarian-minded, or if he feels that he is being pushed into this relationship, the training will certainly be poor. In any of these circumstances the position is likely to degenerate into a reviewing stand. Attention soon flags in repetitious exposure to issues in which the observer is charged with no duty. Able assistants who are placed in such an environment would soon be lost to the firm.[2]

Role playing. Role playing is a recently developed technique frequently urged as a training device. Its purpose is to aid participants to understand the nature of a problem or a point of view and enable observers to evaluate various approaches. Thus, for the problem of handling grievances, two individuals from a class would be selected to act out the parts an employee and a supervisor actually play. When this situation is enacted by various pairs among the class and the techniques and results are discussed, the auditors are presumed to reach conclusions about the most effective means of handling similar situations.[3]

There are several obvious drawbacks to this technique. It is not possible to create the environment of the work situation. The roles as actually played have no necessary relation to the roles that would be played in practice. The technique is not one which is subject to validation. On the other hand, it is an interesting device that may have some value in broadening the viewpoints of the participants.

Temporary promotions. Although many firms may occasionally resort to temporary promotions, the use of this device for training purposes entails difficult problems of organization. The large-scale firm that desires to train a group of candidates by this method would need to make certain that a given number of departments or sections be without a permanent head or that the position would be vacated on schedule, an arrangement obviously impossible. Nor would it be possible to assess personal responsibility for the conduct of departmental affairs. The mere fact that a *promotion* to "acting" head is involved reflects the increasing importance of the jobs each trainee would hold.

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[2] L. F. Urwick, *Profitably Using the General Staff Position in Business*, General Management Series, No. 165 (New York: American Management Association, 1953).

[3] M. J. Dooher and V. Marquis (eds.), *The Development of Executive Talent* (New York: American Management Association, 1952), Chaps. 20–21.

On the other hand, the medium-sized and the small firm may find temporary promotion an ideal way to train a candidate. Since the training in such firms is necessarily discontinuous, the man who is tapped for future greatness may very well be moved up to acting head at a time when the permanent appointee to that position is temporarily absent. The candidate would then presumably be responsible for departmental conduct during his period of service.

But certain drawbacks are inescapable. Is it possible to hold a man responsible for the conduct of a temporary position? Can the performance of a temporary appointee be evaluated? A large degree of drift or procrastination is permitted by the occupant of any managerial position surrounded by well-known and tested policies and procedures. Furthermore, the attempt of a candidate to do something different, such as to reverse a previous decision or to introduce new interpersonal relationships, is quite unlikely to be productive of good results. If these limitations are understood, however, and if expectations are moderate in view of these drawbacks, temporary promotion can be useful. But it is much inferior to the real test of a permanent appointment.

Committees and junior boards. When used as a training technique, the committee and the "junior board" have come to be known as multiple management.[4] These committees are composed of a group of middle-level managers, selected on the basis of merit ratings, who meet regularly to consider any proposal affecting the firm's welfare. Agreements reached by these "idea men" are forwarded to the responsible general officer of the firm, who may adopt, reject, or table them, refer them back for further consideration, or send them to the board of directors. The advantages claimed for this type of training are that the perspective of the members is broadened and a sense of responsibility for the welfare of the firm is developed.

Where this technique has been used, there are strong overtones of paternalism exercised by senior officers, despite loud protests of noninterference. One can afford not to interfere when he designates the person receiving the training, promotes from among these men, and evaluates their deliberations. Such a technique can, however, be useful in small firms that do not possess skilled specialists in personnel, marketing research, or engineering. Perhaps they can "afford" to devote an enormous number of man-hours to the solution of issues involving these skills, especially when the candidates are investing their own time.

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[4] The original idea is commonly credited to McCormack and Company, Inc., Baltimore. See Charles McCormack, *Multiple Management* (New York: Harper & Brothers, 1938); also Dooher and Marquis, *op. cit.*, Chaps. 11–13.

There is, of course, universal recognition of the value a manager gains from his membership on a committee. The new junior man is soon likely to be placed in one or more of these groups. Here he does get a broad viewpoint, develops an understanding of enterprise needs and purposes, and gets experience in leadership techniques. But such activity is undertaken in the ordinary course of employment. It is not in any sense extracurricular.

Conference programs. Another widely used device is that of conference programs. The phrase ordinarily implies a group exposure to ideas developed by some leader or speaker. It is a direct and economical method of transmitting information that applies to all members of a group and permits the use of advanced teaching techniques. Thus a class of junior trainees or a new foreman group may be effectively instructed in the history of the firm, its purposes and policies, and its attitudes toward customers, employees, consumers, and external social groups.

It is easy to overestimate the values derived from conference training. The employment of this device represents the adoption of time-honored techniques of educational institutions. Failure in using it effectively often follows from poor teaching methods and from a failure to understand what can be taught by this means. It is as wrong to assume that any manager can teach in such conferences as to believe that any teacher can manage.

University management programs. In recent years some universities have organized courses, institutes, conferences, and rounded formal programs for the training of managers. These efforts may be as simple as offering an evening course for management students and as complex as offering a full graduate curriculum. The purposes vary from a refresher course in new techniques to instruction in the nature and principles of managership.

Such programs present opportunities for the exposition of management principles, a review of these principles in the light of practical experience and acquaintance with new devices for possible application to the firm. There is the added advantage of valuable group contacts. These values can be important aids to the efficiency of the individual managers.

The drawbacks of university management programs are related to the quality of the subject matter. Businessmen, in their eagerness to learn, are often misled by extravagant claims. Unless those who teach in these programs *really* know what managing is, the effort is all too likely to degenerate into social clubs or the teaching of personal skills in engineering, accounting, statistics, or other specialized areas.

American Management Association's workshop program. The educational efforts of the American Management Association include workshop or seminar instruction in an unusually wide variety of topics. In each instance the particular subject is narrowly defined so that it can be handled effectively in one to three days. Classes are confined to a limited number of participants, usually fifteen, and the discussion method is employed in order to facilitate interchange of varied experiences. The leader of each workshop is usually an operating business executive who possesses both experience and teaching ability.

The handling of this activity is expert in every respect. The advantages consist of knowledgeable leadership, cooperative learning through the exchange of ideas with experienced managers, and concentration upon a limited subject. The program has certain disadvantages, however. Most of the sessions are held in New York, Chicago, and Los Angeles, and it is therefore difficult for many managers to attend. The necessarily limited classes, furthermore, and the concentrated attention on restricted problem areas often fail to reach the numbers of managers who require training and do not always suggest the breadth of training that may be desirable.

At the same time, the American Management Association training program is deserving of the highest praise. Its large number of programs, its emphasis on principles arising from practice, and its unquestioned leadership in the field of management education have probably done more than any other single organized force to broaden and deepen the developing science of management in this country.

Summary. In view of the fact that the devices used for management training should be selected in accordance with their efficiency in meeting particular needs, it is quite apparent that any one technique has limitations. Even combinations of various approaches to this subject must be tailor-made to suit the needs of the candidates within the framework of the enterprise requirements. As the preceding review has indicated, many approaches to this subject are misconceived or based upon questionable assumptions. On the other hand, there are circumstances in which university programs, conference techniques, planned progression, and other devices, in combination and with the proper emphasis, will yield excellent results.

Thus, a good approach to management training is the result of careful planning. The objective to be reached should be made clear, the alternative plans for achieving this purpose should be evaluated and a decision made to adopt the most efficient means for the ends desired.

THE PECULIAR EFFECTIVENESS OF COACHING [5]

Coaching involves the development of managerial know-how through careful counseling and direction on the part of the immediate superior. It thus embraces managerial teaching of subordinates by their superiors through evaluation of on-the-job experience.

Effectiveness. The basic assumption of those who advocate the coaching technique is that men learn by doing. Candidates for managerial positions thus develop best when assigned duties of a supervisory nature. Such delegations are best made by immediate superiors, who know the subordinate best. Since they know his weaknesses, as well as his strong points, they can assign duties to help the trainee overcome them. This emphasis on a variety of experience rests upon sound psychological grounds, for it is now certain that the continuous repetition of skills in the same task quickly runs into steeply diminishing returns with respect to personal growth. Hence, a judicious selection of duties for the subordinate speeds up the development process.

Although there are few who will quarrel with the advantages of "doing," it is easy to overrate what can be learned in this regard. Learning is an extraordinarily complex process, about which relatively little is known. Certainly there are numerous learning techniques. It is notorious that managers on the job do not learn there such skills as communications ability, scientific procedures, and breadth of outlook. But practice in the application of management principles and the development of leadership and judgment can be accomplished only in this way. Hence, coaching can be peculiarly effective if it is conducted by immediate superiors who understand its limitations. An important implication of the coaching process is that the superior who would use this device must be a person who can assign duties and delegate the authority to carry them out. This point is obvious, since the opportunity to learn from experience implies the freedom to undertake the activity in a way that seems best to the subordinate. Some superiors, incapable of delegating authority because of personal insecurity, distrust, or ignorance, can hardly effectively employ the device of coaching.

The nature of counseling. The counseling of subordinates is an integral part of the coaching process. It involves the *continuous* analysis by both superior and subordinate, on a face-to-face basis, of the latter's performance. Rather than leaving to chance what is learned from experience, counseling makes certain that lessons are learned.

Counseling is an effective way to get a new subordinate oriented in his job. It gives him a clear understanding of the way his superior looks at interdepartmental relationships and personalities. The analysis of a specific performance will give superior and subordinate alike an opportunity to learn why the results were good or bad. The superior can then demonstrate the importance of considering alternative ways and, out of his experience, give the trainee some idea of how to weigh intangibles. Even before an assignment is undertaken, the subordinate may seek out his boss in order to avoid the necessity for making his own decision. The wise counselor, recounting his own past experiences and exploring various ways that the issue might be handled, will give no hint about how it should actually be undertaken. Such a decision is the responsibility of the subordinate, and he needs training in its discharge. In similar fashion, particular managerial skills may come up for discussion. These, in time, will cover the gamut of personal problems, interpersonal relations, leadership, getting things done, follow-up, and promptitude. Eventually, the able subordinate will develop a wide variety of such skills, and the wisdom to select the most effective from among them in any specific instance.

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[5] For an excellent discussion of this technique, see M. L. Mace, *The Growth and Development of Executives* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1950), Chap. 6.

Although numerous methods, both formal and informal, for such training exist, their standardization is obviously impossible. Counseling is intensely personal in nature and is related to the personalities of superior and subordinate. Consequently, any blind imitation by one superior of an effective method employed by another has no assurance of being suitable. The superior will use those means that are effective for *him,* but even these must be varied to fit the different personalities of successive subordinates.

Whatever the method chosen, however, it is the duty of the superior to let his subordinate know where he stands. It is not sufficient to do this at the time of the annual or semiannual appraisal. It is necessary to provide this information on a continuing basis, whenever the subordinate seeks counsel and whenever performance is analyzed.

Relation of confidence to coaching. The belief on the part of the subordinate that his superior has confidence in him is another strategic element in the coaching technique. In such a climate the exchange of information between superior and subordinate can be extremely valuable. The trainee may even feel that no harm will come to him if he brings bad news. The superior will make certain that he is physically available to his subordinates at all times. Indeed, he can, through expressions of encouragement and confidence, create in the subordinate a feeling that under no circumstances would he disappoint his boss. Many assignments that look too big are carried off by men who "couldn't let their superior down."

This edifice of confidence is very difficult to build up. It requires immense patience and wisdom. It can be easily impaired or destroyed. Whether inadvertently or by design, the superior can, through carelessness, ambition, pressure of other matters, or the hazards of circumstance, undermine this carefully constructed relationship with a frown, a slight, an impoliteness. The process can be identified with the quality of intimacy that exists between superior and subordinate. Oftentimes a weak superior will permit boldness, poor taste, boastfulness, and the appearance of special favor on the part of a subordinate. The dignity of the superior's position is clearly assailed by such behavior.

The maintenance of the correct level of confidence is the responsibility of the superior. If he is an able man, he has two advantages over his subordinates. He has the authority and tradition of his office, and he has the assurance that rests solidly upon a sense of superior ability.

In this context, personal authority and the traditional dignity of the office are complex phenomena. The superior must act as a superior is supposed to act. Society has traditions of approved behavioral patterns, and the particular role expected of the boss is no exception. He is viewed as an isolated individual who has an air of success, is a decision maker, is an inspired leader, and obeys with unusual conscientiousness the mores of society. This means that the superior must be an unusual combination —a moral being who does nothing to offend his subordinates, and an aggressive, effective manager who decides issues positively and with wisdom.[6]

The personal dignity of the superior rests solidly upon his skill as a manager. As compared with his subordinate, the superior should be wise in the knowledge he has extracted from broad experiences. He should take care that his managerial functions are known to the trainee, that he plans well, follows the principles of good organization structure, selects subordinates with the best tools available, is skilled in directing those who report to him, and has tested standards by which performance can be evaluated with confidence. Whether he is gruff, amiable, or shy is really of no importance. But he must be fair. The personal respect in which he is held correlates exactly with the confidence that subordinates have in his ability to manage and in the logic with which decisions are reached.

Encouraging executives to coach. The ability to coach is a rare skill. It is a technique that becomes suitable to the superior after he is certain that the development of capable future managers is a major service he can perform for the firm. This viewpoint is difficult to develop because immediacy is given such high priority in business operations. It is much easier and indeed, it is traditional, in getting a quantity of work out, to order subordinates to do things. The basic question is whether the present or the future is more important to the firm. If it is true that "there is nothing about an organization more important than its future,"[7] then it is obvious that superiors must be rewarded for adopting this viewpoint. Once this is done, the development of capable managers falls into its appropriate place in the firm's objectives. In such an undertaking there is no question but that coaching is a superior training technique. The subordinate who has been wisely chosen in the first place will blossom forth with unexpected ability in the hands of a superior who takes pride in the number of successful executives he has trained, who evaluates mistakes in terms of the lessons they teach, and who is content unobtrusively to watch over a subordinate to whom he has given an exacting assignment and the authority to carry it out.

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[6] E. P. Learned, D. N. Ulrich, and D. R. Booz, *Executive Action* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1951), pp. 53–58.

ORGANIZATION AND ADMINISTRATION OF A STAFFING PROGRAM: A SUGGESTED APPROACH

Particular attention should be given by any business to the organization and operation of a suitable program to select, appraise, promote, and retire executives. Altogether too many firms have neglected this function and have permitted it to drag along as an appendage of the personnel department.

Role of the top managers. From the premise that preparation for the future is the most important activity of enterprise managers can be deduced the broad outlines of the organization of the staffing function and the part senior executives must play. The active and continuous interest of this group is essential for two reasons. First, its prestige is necessary to smooth out administrative procedures. Staffing programs undertaken without top-level backing become inoperative. They fail of their purpose, even though well conceived, unless they can secure the full cooperation of the affected managers. Secondly, there is an important psychological principle at work. Subordinates imitate their superiors. Even though extensive training lessons are well learned by the front-line supervisors, they will not put them into practice unless they receive the approval of both subordinates and superiors.[8] The role of the superior in this process is vital. If he knows, understands, and practices the techniques taught in the training classes, his subordinates will implement them. But if he practices inferior techniques, his subordinates will do likewise. Supervisory training begins, therefore, at the presidential level and must be taught by superior executives to their subordinates at every level in the organization structure.

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[7] P. E. Holden, L. S. Fish, and H. L. Smith, *Top-management Organization and Control* (New York: McGraw-Hill Book Company, Inc., 1951), p. 4.

[8] Walter R. Mahler, "A Research Approach to Supervisory Development," *Organizational and Personnel Problems of the Manufacturing Executive*, Manufacturing Series, No. 204 (New York: American Management Association, 1953).

A committee composed of the president and his senior executives is an excellent means for furnishing leadership for a staffing program. It has the advantage of building into the program the prestige and the active support of top managers of the firm. Moreover, the nature of the duties to be undertaken, requiring the pooling of ideas and participation of major department heads, is such that the committee form is especially suitable.

In developing an effective program of staffing, there appear to be four principal functions for which top managers are responsible. They should provide a mechanism for coordinating and implementing the program, probably through appointment of a director in charge of management development. They should also make sure that the roles of all managers in the enterprise are clearly defined, that basic staffing policies are formulated and understood, and that progress under the program is periodically reviewed.

If a director is appointed, he becomes the administrative officer responsible for ensuring that the program of management development is undertaken and for coordinating staffing activities throughout the enterprise. The director should report to any senior executive who has the interest and ability to give him guidance and should have access to the committee of top managers of the company. While he directs the program and is responsible for it, he cannot and should not assume responsibility for the actual development of managers throughout the company, since this responsibility must be exacted from managers whose subordinates are being trained. In small and medium-sized plants, the director is likely to undertake the program on a part-time basis while giving his attention to other duties. Normally, the person selected to head the management program should be an experienced manager who is interested in proper staffing and will give it sympathetic and intelligent attention.

One of the important tasks of top managers is the definition of the positions of the various subordinate managers. Furthermore, department managers must understand that they, in turn, have a responsibility for the selection, training, and promotion of the subordinates reporting to them. Unless managers at every level in the organization clearly understand their staffing responsibilities and unless their job descriptions are amended to include this duty, there is every reason to expect failure. Every manager should be held responsible for his departmental operations. But if his subordinates are selected for him, trained for him, and promoted without his approval, he can hardly be held responsible.

The development of a staffing policy is a necessary activity. The deliberations in this area will mold the complete executive-development program. They will provide the broad guides for the program director and others to translate into detailed procedures and practices. A statement on recruitment policy should be made, to require the search for candidates from within the firm, from college graduates, and from outside sources.

A promotion policy will yield excellent results if it rests upon comprehensive appraisal and the dictum that a manager who has no capable successor will not be promoted. It will bind the interests of every manager to the success of the whole program. It will require the director to see to it that satisfactory techniques are adopted for periodic appraisal. And it will lead him to develop a recording procedure to permit the sifting of records for the purpose of identifying those men whose qualifications approximate the job requirements.

It may also be desirable to develop a retirement policy, although in many firms this function is reserved to the board of directors. At the present time this subject is being widely reconsidered throughout the nation.

Periodic review of the development program is the means by which the top managers maintain control, make certain that policies are being carried out efficiently, and develop the basis for policy modification.

Role of the program director. The duties of a program director are rather well known and need not be detailed here. Essentially he is assigned the duty of developing the organization, procedures, and records necessary for executing the policies of the committee of top managers on staffing. His activities are largely concerned with keeping up to date in terms of new knowledge and techniques, and with providing service to other managers. He does *not* make appointments to any position.

Improvement in Managerial Development

The benefits of a managerial-development program are surely obvious. But it is equally obvious that the program needs to be well balanced and carefully developed. As with most new ideas, techniques, or products, the human race suffers here from the propensity to imitate. Many firms have tried to develop a program copied from the odds and ends that come to their attention. There is also heavy propaganda from sources whose interests tie in with the expansion of such programs. Consequently, it is desirable to caution firms once more about the dangers of adopting a fad.

Training future executives is vital to successful management, and, as such, it deserves the benefits of sound theory and practice. The development of a satisfactory program is a case study in scientific methodology.

It requires a careful study of the enterprise needs, the discovery and testing of alternative ways to achieve the enterprise objective in this regard, a settlement upon the most appropriate plan, and a full-scale backing of the selected program. It is not too much to say that enterprises that go about the matter in this way cannot go wrong. Indeed, it is their best insurance for success.

Selected References

Dooher, M. J., and V. Marquis (eds.), *The Development of Executive Talent*, Chaps. 7–29. New York: American Management Association, 1952.

Drucker, P. F., *Concept of the Corporation*, pp. 20–40. New York: The John Day Company, Inc., 1946.

Mace, M. L., *The Growth and Development of Executives*, Chaps. 5–8. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1950.

Newman, W. H., *Administrative Action*, Chap. 20. New York: Prentice-Hall, Inc., 1951.

Riegel, J. W., *Executive Development*, Chaps. 10–21. Ann Arbor, Mich.: University of Michigan Press, 1952.

Urwick, L. F., *Management Education in American Business*. New York: American Management Association, 1954.

PART FOUR

DIRECTION

18

PRINCIPLES OF DIRECTION

Direction is intimately concerned with getting things done. One can plan, organize, and staff, but nothing gets done until subordinates are taught what to do and told to get on with the job. The difference between all other executive functions and direction is comparable to the difference between sitting in an automobile with the motor idling and putting the car into gear. Inattention to the way in which a business is put into gear has given rise to many deficiencies in the form of incomplete knowledge, trial by error, imitation, and quackery.

A good working definition of direction is the executive function of guiding and overseeing subordinates. The point of view implied in this concept has several advantages. First, and most important, businessmen will understand it because they look upon direction in this way. Secondly, the activity of guiding subordinates emphasizes appropriately the great importance of the manager's teaching function. Probably more than he realizes, the executive is a teacher. "It is as important for us to be effective teachers as it is for the members of any college faculty." [1] He has to explain to subordinates, describe, illustrate, and correct their tentative experiments. He has to assign tasks and command their accomplishment and must guide subordinates in their efforts to develop teamwork. Thirdly, direction is in its every aspect a function of the superior. Subordinates receive supervision: they never give it. Finally, every manager who has at least one subordinate engages in the directive function.

Managers direct subordinates because it is through them that work assignments are done. A study of the function of direction will be most fruitful, therefore, if it takes the form of a systematic analysis of the methods and techniques available to the manager for the development of a proficient team of subordinates.

Relation of Direction to the Delegation of Authority

Since authority is the right to command a subordinate to perform a service or to command him not to undertake an activity, it is a prerequisite of the manager. Delegating authority is the concern of every manager in the enterprise except the front-line supervisor. As far as direction is concerned, the issues surrounding the delegation of the right to command others are interpreted in terms of their efficacy in the development of proficient teamwork.[2]

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[1] William B. Given, Jr., "Experience in the Development of Management People," in Marvin Bower (ed.), *The Development of Executive Leadership* (Cambridge, Mass.: Harvard University Press, 1951), p. 84.

Common misconceptions. The analysis of the relationship between delegation and direction will be facilitated if several rather common misconceptions about the former are first cleared away. It is apparent that work assignments and the authority to carry them out are delegated to subordinate managers. But these grants are by no means easy to make or certain to achieve their expected results. Many qualitative issues arise. Their practical disposition by superior managers leaves many elements of uncertainty about either the way they should be handled or the anticipated results.

Delegation of Duties. Apparently, all that is required in assigning duties is to specify which man is in charge of purchasing, production control, maintenance, or some other task. Just what is involved in these assignments? Breakdowns are attempted in job descriptions, but it is extremely difficult to make these clear and definite, on the one hand, or distinguishable from similar delegations, on the other. For example, one firm delegates to the purchasing agent the following duties: (1) to advise his superior on the formulation of procedures relating to procurement; (2) to make the necessary contacts with vendors and constantly study the commodity market conditions; (3) in accordance with authorized requisitions, to purchase materials and supplies from vendors; (4) to negotiate with vendors the claims arising from inspection rejections; (5) to administer the personnel and financial policies as they apply to his operation; and (6) to accumulate information for the preparation of his budget.

At first glance, the assignment contained in these statements may appear clear and exact. But let the reader place himself in the position of this purchasing agent. Just what, when, and how much effort is called for? Does "advising his superior" about procedures mean constructive suggestions, presented in tentative written form, and based upon an analysis by an industrial engineer? What are "necessary" contacts with vendors? What does one do to study the commodity market "constantly"? Does claims negotiation mean exclusive power to conclude an agreement? Merely raising these questions serves the purpose of illustrating the common inexactitude with which a work assignment is made. The man who undertakes a job described in this fashion will have to play by ear. In fact, most managers do!

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[2] For an excellent discussion of delegation, see E. P. Learned, D. N. Ulrich, and D. R. Booz, *Executive Action* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1951), Chap. 6.

I LOVE YOU

Overlapping of the work assignments made to two or more subordinate managers is another common difficulty. So long as the delegations are made in general terms, this kind of trouble is certain to emerge. For instance, in the matter of negotiating sales contracts or claims on vendors, the legal department will be involved, as well as the sales and buying departments. Just where the function of the one manager leaves off and the other begins can scarcely ever be made clear. In practice, managers have to learn to live with these uncertainties and to interpret their meaning in the light of the facts in any given situation.

Delegation of Power. The delegation of power to a subordinate manager is an even less exact process. Such delegations most often read that the subordinate has the authority to carry out the assigned duties. Since the scope of the work itself is not clear, the incumbent is certain to have considerable difficulty in interpreting his power to do anything. For instance, in the case of the aforementioned purchasing agent, just how far is he free to go in negotiating claims with vendors? Can he settle for any percentage of the claim? Can he cut off the vendor if there is not full satisfaction? Can he require or recommend prosecution? Even though he asks his own superior for a clarification, there is no certainty he will get it.

Specific versus Broad Grant of Power. Superior managers differ considerably in their attitude toward the grant of broad power to a subordinate. This is not a matter of choice. It involves the question, how specific can a grant be? The answer depends upon the degree to which the work assignment is specific. If a supervisor is assigned the duty of disciplining his subordinates, the delegation of the power to do this will be broad. On the other hand, if the duty specifies that the supervisor's disciplinary action is limited to a referral to the grievance committee or a request that the employee be transferred, his power to discipline will be strictly spelled out. It is possible to generalize tentatively on the basis of the relatively specific nature of the work assignments: (1) Specific power is associated with specific work assignments. (2) The delegation of power is broad at the top of the organization structure and becomes increasingly narrow as lower echelons are reached.

Implied Power of the Subordinate Manager. Purely from the point of view of efficient operation, the enterprise is forced to admit the implication of power that adheres to all its managers. Power is not an end in itself. The objective of enterprise is a profitable operation. As a consequence, the importance of acting in the best interests of the firm overrides any nice delegation of limited power. Probably there is no manager of any experience who has not exceeded his received powers. An unforeseen bargain tempts many buyers to exceed their contractual powers; a sale that rests upon a relaxation of price or terms is often confirmed by superiors, notwithstanding strict orders forbidding such practices; violations of company rules are sometimes condoned; and the firm is often committed financially by a manager who is believed to have the power but who does not. The pattern that emerges from these examples is that trusted managers are presumed to act in the best interests of the firm, whether they actually have power in the particular instance or not. Only in this way can an enterprise cover unforeseen opportunities to benefit from circumstances and avoid undue stultification.

Implications of the rigidity concept of delegated power. There are many managers who view the delegation of power to a subordinate with untoward rigidity. These executives dislike to make any delegation at all, and when they are forced to do so, they endeavor to circumscribe the grant with a neat exactitude. When assigned a duty but not the power to carry it out, the subordinate ceases to be manager. Such superiors feel that delegations can be made accurately. They feel that the results which they, personally, anticipate will be achieved. Disappointments are likely to be followed by harsh judgments on the ability of their subordinates. When everything seems neat and clear to these superiors, they feel untoward frustration when their plans fail to work out.

This attitude toward the delegation of power rests upon a highly complicated psychological foundation. In the first place, such a superior feels that only he is capable of doing a good job. Again, such a man lacks trust in his subordinates, fearing that the latter does not know how to undertake an activity and that he will not do it well. Such a view of the matter may lead the superior to a fear that the welfare of the firm will be jeopardized by the errors of incompetent subordinates. Furthermore, such a superior may feel very insecure in his position. If this is his reason for rigidly circumscribing delegated power, he must believe that the errors of his subordinate managers will cost him his job.

The effects of this attitude toward delegation upon the firm are especially serious. In the first place, such a supervisor is incapable of developing a successor. Many types of subordinates would refuse to work for him. And the quality of those who are willing to work in this environment would be subject to question. Then again, subordinates learn to manage by managing. If they are deprived of opportunities to make their own decisions, to exercise their own judgment, and to act on their own volition, it is clear that they will neither make errors for which they are personally responsible nor learn anything about managing.

In the second place, a rigid concept of delegation will limit the size of the enterprise and stultify its growth. This result follows naturally from the principles of departmentation. A manager who makes little use of his subordinate managers must, of necessity, make the decisions himself. The span of management places limits on what one person can do. Even if the regular workday is supplemented by long hours of night work, these restrictions still hold. Beyond such a point nothing gets done. The firm is bound in iron by this span, and its further growth is impossible.

The positive attitude toward delegation. Executives who have a positive attitude toward the delegation of power to subordinates view their directive function in an entirely different manner. Their personal security is not a consideration with them. And, with the confidence that results from an intelligent selection and appraisal program, they are willing to trust their subordinates. Against this background such executives view their greatest service to the firm to be one of developing future managers.

The Basic Assumption. Those executives who look upon their job in this light are willing to accept the basic assumption that men learn to manage by managing. This position implies adherence to one of the important means of learning and reflects a mature judgment based upon extensive past experience.

Implications of the Positive Attitude. All managers who direct subordinates find themselves faced with two important objectives. One is to get the work out. The other is to develop future managers. Those who adopt a rigid view of delegation almost wholly neglect the second purpose. On the other hand, those who have a positive attitude necessarily give primacy to managerial development. This does not mean that the daily tasks are overlooked. But errors made in their accomplishment are turned into object lessons for subordinates. The errors are, of course, minimized by appropriate safeguards—a point that will be developed later. But they are not looked upon simply as catastrophes. A proper analysis of the issue and the way it was attempted is viewed as valuable grist in the mill of judgment. This attention given to maturing subordinates reflects fully the belief that nothing is more important to a firm than its future.

A second implication of the positive attitude is that subordinates must be encouraged to accept responsibility. Their superiors want to see them become self-starters, see them grow in the exercise of authority. To accomplish this end, the superior needs to study each subordinate, feed him a gradually expanding degree of authority, and hold before him the challenge of unusual accomplishment. Experience in managing implies the power to manage, and this delegation is made gradually as the performance of the subordinate merits.

A further implication is the necessity to keep open the channels of communication between superior and subordinate. The superior must be *available*. He needs to be unobtrusive in direction. It is essential to permit the subordinate to "pick his brains," because this is a short cut to experience. At the same time, the temptation to tell the subordinate what to do and how to do it must be firmly resisted. Any yielding at this point will undo all the advantages of delegating power, discourage the subordinate's self-starting proclivities, and limit his personal experience. In fact, "telling" is an actual revocation of delegated power.

Finally, the positive attitude implies a willingness to exercise immense patience. It takes a long time to acquire good judgment and successful leadership ability. The temptations of short-run opportunism are often overwhelming. The superior can readily see, on the basis of his mature judgment, what must be done. But he cannot order it done, for this action would deprive the subordinate of all chance to discover an effective procedure. The superior needs patience to put up with mistakes and fumbling and the slow acquisition of good sense. And he must be a man who can get complete satisfaction from his success in developing capable men.

Centralization of authority in relation to direction. The retention of power in the hands of a few top managers of an enterprise and efforts to recentralize power are both consistent with the rigid view of delegation. Those firms that may be characterized in this manner have relatively few managers because expansion cannot be achieved readily. Close supervision and lack of trust tend to attract subordinates who shun responsibility and literally insist upon being told what to do and how to do it. The enterprises that maintain centralized authority are without the power and ability to develop their own future managers. Of necessity, they are forced to import them from outside firms.

Decentralized authority is consistent with the positive attitude toward delegation. Firms that may be characterized in this manner have managers who are able and willing to develop future executives. Their confidence stems from their willingness to encourage potential managers by gradually increasing the degree of delegated authority. By this means they are able to provide the essential experience upon which leadership and judgment may be tested.

Degrees of delegation. There are two important issues that face the superior who desires to delegate power to a subordinate in order to give him managerial experience. The first concerns the degree of delegation to a particular individual. It is clearly inappropriate to carve out a group of duties and the authority to undertake them and assign this bundle to an inexperienced supervisor. He needs time to grow. Consequently, the assignment should be characterized by a gradual expansion of the subordinate's authority, as the superior oversees, instructs, and tests the subordinate through specific assignments. This process does not imply that the subordinate's duties are not being accomplished. The job is being completed under the instructions and relatively close supervision of the superior. As the capacities of the subordinate increase, his superior will relax the overt overseeing and expand the authority of the employee to devise ways and means of accomplishing his assignments.

The second issue concerns the delegation of authority to several subordinates who are in different stages of development. Since the degree of delegation is highly correlated with proved capacity, the extent to which a superior delegates authority to individual subordinates will vary. The several subordinates will ordinarily be at various stages of development at any moment of time. Those who have shown some ability in past assignments will be tested by a further expansion of their authority; those who will not or cannot use authority in a constructive manner will lose it.

Attempts to manage a program of this type are not without their difficulties. There will be subordinates who overestimate their capacities to manage and who, for this reason, will resent a relatively limited degree of authority. And there may be subordinates who prove themselves incapable of further development. In dealing with the first category, the superior will have to demonstrate his impartial intentions and his sincerity in expanding the degree of delegation consistent with employee growth. A failure to do this will ordinarily result in dissatisfaction among such subordinates and the probable loss of those with real potential. Dealing with subordinates of limited capacities involves a more clear-cut procedure. Such individuals should not, of course, have been made supervisors in the first place. There is no alternative but to remove them from supervisory work. This can be done by explaining the circumstances to the subordinate (taking the blame for the appointment in the first place) and finding an assignment that better suits his capacities. This may be removal to a nonsupervisory position in the department, a transfer to another department, or separation from the firm. The superior who by nature and training possesses a positive attitude toward delegation simply cannot permit subordinates without a potential for management to act as supervisors. If they do, frustration and unhappiness will be the lot of all.

The Principle of Harmony of Objective

A great deal of confusion has accompanied the many efforts to explain the harmony that must exist between subordinates' objectives and those of the firm. Different viewpoints seem to be a reflection of the way in which social cooperation is visualized. Preoccupation with labor-management issues, military organization, or the place of the individual in society has left many observers biased in their views. And many fail to distinguish between motivation and individual objectives.

Fayol's principle of centralization. Writing several decades ago, Fayol was concerned with the direction of subordinates.[3] He pointed out that the manager who retained his authority in high degree was able to direct employees with few counterinfluences, and consequently, could maintain a singular unity of view among them with respect to the enterpise purpose. However, he admitted that, when orders were filtered down through several echelons of intermediaries, they were altered, even unintentionally, by these subordinates. This phenomenon permitted the growth of divergent views relating to the firm's objective among the enterprise personnel.

Fayol considered that the top manager's choice of procedure depended upon his personal character, his moral worth, his experience, the reliability of his subordinates and the condition of the business. On the basis of his own evaluation of these factors the manager decided upon either centralization or decentralization as the best means of achieving the optimum utilization of all the faculties of the enterprise personnel.

Urwick-Fayol principles of command and control. Fayol's sixth principle states that the business interest prevails over the interest of employed individuals and groups of persons.[4] He suggests that the individual characteristics of ignorance, ambition, selfishness, laziness, weakness, and human passions are forever at war with the best interests of the firm. Consequently, it is the duty of the manager to combat these tendencies through firmness and good example, fair agreements, and constant supervision.

Urwick interprets Fayol's principles of command and control to apply in such a way that all activities of the firm will serve the common purpose.[5] When command and control are highly centralized, it is relatively easy to point up activities to accomplish the firm's objective. On the other hand, decentralization of authority often permits those persons at middle and lower levels in the organization structure to sacrifice the firm's objective in order to serve personal ends. In this way, the enterprise objective may fail of realization.

The Urwick-Fayol principles have the particular merit of focusing attention upon the paramount nature of the enterprise objective. The reason for associating people in a group effort is to accomplish an objective that cannot be otherwise attained. Consequently, the purpose of the association is a jealous mistress, which permits no wandering attention to subordinate interests. It requires for its realization perfect clarity and understanding among all persons in the association and ideally permits the expenditure of no energy that does not contribute to its achievement.

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[3] Henri Fayol, *General and Industrial Management* (New York: Pitman Publishing Corporation, 1949), p. 33.

[4] *Ibid.*, p. 26.

[5] L. Urwick, "The Function of Administration," in L. Gulick and L. Urwick (eds.), *Papers on the Science of Administration* (New York: Institute of Public Administration, 1937), p. 127.

These views of Urwick and Fayol are subject to two criticisms. On the one hand, they tend to overlook completely the existence and functions of managers located in the organization between the top executive and the workers. On the other hand, they ignore the harmony that may be permitted to exist between the individual goals of subordinates and the achievement of the enterprise purpose. The assumption that well-indoctrinated subordinates will become imbued with a determined purpose to accomplish the objectives of an enterprise is not always in accord with the facts.

Confusion of motive and objective. The motives that prompt persons to engage in group activity are entirely distinct from the associative purpose. They run the gamut of human drives. Most people have to work for a living. Many are not permitted the enjoyment of many goals beyond that of assuaging their hunger. But in the United States and many other countries the necessity to work is ordinarily tempered both by alternative ways to make a living and by relatively high income levels. These factors permit the individual employee the luxury of seeking many purposes, which include improvement in status, increase in living standards, and higher educational standards.

The objectives, goals, or targets for which men strive are, of course, quite distinct from motives. It is a matter of what comes first. The motives are the basic drives. The objectives are the targets whose realization will, it is thought, enable the individual to satisfy his desires. Thus, a person may strive to become a supervisor because he wants to exercise the power such a position carries, to luxuriate in the prestige it will generate among his fellow men, or to improve his income. Indeed, the achievement of a single goal of this type can often serve to satisfy several diverse drives simultaneously.

The principle of harmony of objective. The intention of the individual to satisfy his personal drives through the achievement of personal objectives is harnessed by managers so that effort will be productive. Such personal goals as becoming a manager, being promoted to higher echelons, and occupying positions that carry prestige and higher incomes can be achieved in enterprise because the effort to realize them can be harnessed in such a way as to contribute to the firm's purpose. Consequently, enterprise managers may follow the principle of harmony of objective. In accordance with this proposition, managers do not insist that all their subordinates have the same objectives. Neither do they require that personal goals be identical with the firm's objective. Rather, they encourage their subordinates to seek goals that will yield personal satisfactions and, at the same time, contribute positively toward the realization of the enterprise objective. Indeed, the alert manager will go one step further. He will suggest the goals and attach to them the rewards for which men strive.

Although the principle is vital in business activity, the complexity of operations often permits important aberrations to occur. For instance, the sales manager's objective is to sell the products of a firm in a volume that equals or exceeds his forecast (within, of course, the broad limitations imposed by policies relating to price, credit, or quality). He will attempt to achieve a desired level of selling effort among his functionally differentiated subordinate managers in charge of personal selling, advertising, and sales promotion. Although the problem is theoretically easy of solution, in practice it is very difficult because of the lack of adequate data on productivity of the various techniques. Consequently, inadequate information and controls often permit the subordinates to build personal empires, to overplay their hand, to compete in a destructive manner for budgetary advantages, and even vie for personnel. Contentions of these types may preoccupy the time and thinking of subordinate managers to the extent that the achievement of the departmental purpose may be jeopardized. Efficient direction clearly calls for the provision of goals whose achievement will provide the personal satisfactions for which men strive but which will contribute to the accomplishment of departmental or enterprise objectives.

The Principle of Unity of Command

This principle has been discussed in Chapter 14 in connection with the organization of an enterprise. The point was made that an organization should be developed in such a way as to permit any single manager to exercise sole command over his subordinates.

The principle is applied in business enterprise to make certain that an employee receives his orders from only one person. The importance of such a restriction was not realized by F. W. Taylor when he experimented with an organization structure that permitted eight functional foremen to give orders to the individual workman.[6]

The principle is viewed from the obverse side in military organizations. Here the unity of command is followed "so that its [organizational element's] responsible head can be held solely accountable for results to higher authority." [7] The emphasis is placed upon the protection of the superior through the definite personal obligation of a subordinate to see that assigned activities are properly performed. Little thought is given, apparently, to the improved efficiency of the subordinate when he receives orders from a single superior.

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[6] F. W. Taylor, *Scientific Management* (New York: Harper & Brothers, 1947), pp. 98–109.

[7] J. R. Beishline, *Military Management for National Defense* (New York: Prentice-Hall, Inc., 1950), pp. 89–90.

The complex of forces, all personal in nature, that every manager must manipulate if he is to accomplish a task through other people permits no interference in the guidance and supervision of subordinates by other persons. Direction can be most efficiently achieved by one person. He knows, better than anyone, the nature of the subordinate, the types of motives to which he best responds, and the quality of his technical proficiency. Consequently, the immediate superior is in the best position to select the techniques of overseeing and guidance that will result in maximizing the productivity, not of the individual employee particularly, but of the group of subordinates.

The essentially personal nature of direction implies that the manager must guide and supervise each member of his group of subordinates on an individual basis. These people are characterized by their individuality; hence they require peculiarly personal direction. This characteristic is the basic reason for the existence of a span of management. For if it were possible to treat subordinates in the same way that bushels of wheat can be manipulated, they could be assigned a number, included in a mathematical formula, and as many used as the equation required.

Direction, Discipline, and Morale

Every manager is concerned with the quality of discipline and morale that characterizes his subordinates, for these factors have an important bearing upon the productivity of his department. Discipline, or orderly behavior of subordinates, is related to their conformance with rules, procedures, and acceptable social practices. For instance, it is important for subordinates to report on time, observe no-smoking and no-drinking rules, dress as required, follow official procedures in their work, behave in socially approved manner with respect to other persons, and undertake at least a minimum work load effectively.

Morale is extremely elusive. Mooney defines it as "the sum of several psychic qualities that include courage, fortitude, resolution, and above all, confidence." [8] Beishline relates morale to "courage, confidence, and enthusiasm in the performance of duty." [9] And Urwick suggests that tests of morale include the elimination of sloppiness, maximum performance, and tenacity.[10] Thus, it would appear that morale is a spiritual quality that reflects zeal and confidence. Subordinates who possess high morale will work with an assurance that spells vigor in attacking the job, confidence in their own ability and in the ability of their fellows to achieve a given objective, and effective teamwork. It is a pervasive quality that subsumes good discipline and the unity of command and direction. Consequently, it is a net result of effective direction by individual superiors.

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[8] J. D. Mooney, *Principles of Organization* (New York: Harper & Brothers, 1947), p. 127.

[9] Beishline, *op. cit.*, p. 229.

[10] From a seminar given at the University of California at Los Angeles, Apr. 14, 1953.

Nature of discipline. Discipline, or orderly behavior, is a condition to be achieved in the interests of the future welfare of the firm. The past is of no importance, beyond the possible provision of object lessons, because it is fruitless for a manager to punish a subordinate in a spirit of retribution or for the purpose of humiliating him. All disciplinary action, therefore, needs to be qualified by its contribution to improved orderly behavior of subordinates.

The Quality of Orderly Behavior. The quality of discipline appears to be affected by two important factors. The first concerns "the strongest disciplinary force evidenced in human history, the power of faith." [11] Mooney relies upon the history of church and military organizations for the illustration of his point. His view is that faith depends upon the quality of understanding and that, "when the laborer and the boss are bound by the same common understanding of some common purpose, the discipline is on a plane that no other form can reach." [12] Our own army made excellent use of this idea in World War II when the objectives and long-range purposes of a particular campaign were carefully explained to the troups destined to carry out a plan. There is abundant evidence that a lower quality of orderly behavior results from the "tell 'em nothing" attitude of managers in all walks of life. Still better is the practice of not only achieving a common understanding but also pointing out the advantages to subordinates of working for the enterprise objective.

A second factor in discipline is leadership, a point mentioned by nearly all the writers on the subject. Speaking of the conditions existing in the United States in the 1930s, J. D. Mooney says that "the discipline was dependent entirely upon the disposition, mood, and character of the leader, variable in reason and justice, and temporary in value." [13] Fayol observes, "When a defect in discipline is apparent or when relations between superiors and subordinates leave much to be desired, responsibility for this must not be cast heedlessly, and without going further afield, on the poor state of the team, because the ill mostly results from the ineptitude of the leaders." [14] A high quality of discipline is only one result of effective leadership on the part of managers, but it is "absolutely essential for the smooth running of business and—without discipline no enterprise could prosper." [15]

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[11] Mooney, *op. cit.*, p. 177.

[12] *Ibid.*

[13] *Ibid.*

[14] Fayol, *op. cit.*, p. 23.

Disciplinary Techniques. The methods by which subordinates may be motivated to conduct themselves in an orderly manner are usually negative in nature. In enterprise, negative incentives can take the form of deferred or interrupted promotion, transfer to dead-end jobs, deprivation of regular or special assignments, transfer to less desirable jobs or shifts, failure to earn merit increases in wages, and even dismissal. Positive incentives, or rewards, may not be given for good behavior, since the normal expectancy is that all subordinates will conform to the requirements of disciplined conduct. This is not to say that there are no rewards in enterprise, for there are obviously many. However, they are usually gained for other reasons than for achieving an acceptable behavior.

The individual superior will select the appropriate means of raising the standard of discipline to an acceptable level. At such a time his knowledge of the circumstances and of the subordinate can be used to good advantage. These are, indeed, the reasons that he is in a much better position to act effectively than is any other manager or grievance committee. He can take advantage of the technique of private reprimand and public praise in making the best use of the particular approach he chooses to adopt.

Formalities of Discipline. The standards of acceptable behavior derive from the agreements between the firm and its employees. It makes no difference whether these agreements are formal or informal, written or unwritten, or whether they derive from rules and customs, on the one hand, or a union contract, on the other. The elements of acceptable behavior and the degree of freedom that the immediate supervisor has in enforcing discipline are matters that may be highly subjective or may be specified with the greatest care and widely publicized. There is little question but that enterprises that operate under union contracts undertake disciplinary action with considerable formality and presumed precision. There is also the likelihood that the prerogatives of managers are severely restricted in these contracts, even to the extent of their being unable to separate the transgressor from the payroll and being forced to accept personnel against their own best judgment.

Nature of morale. Napoleon said, "In war, morale conditions make up three-quarters of the game: the relative balance of manpower accounts for the remaining quarter." [16] It is always dangerous to specify the importance of a factor in terms of exact numbers without knowing the basic assumptions that the author had in mind. However, there seems little doubt that morale is an exceedingly important factor. Its fundamental basis is personal faith; it can be observed with sparkling clarity in times of adversity; its ultimate refuge lies in the soul of mankind, from which resource it can be given but not commanded.[17] The effective elicitation of morale by managers is one of their chief duties.

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[15] *Ibid.*, p. 22.

[16] *Correspondence de Napoleon* (Paris: Imprimerie Impériale, 1865), vol. 17, no. 14, 276, p. 549.

Variations in Morale. Measures of morale remain most inexact. The expert looks for important symbols, such as neatness, alacrity, promptitude, and especially the voluntary character of conformance. He knows better than to believe that high morale depends upon favorable conditions and good news. Indeed, in such a guise it is easy to misconceive its quality. A baffling characteristic of morale is its variability. The fact itself is well known, but the causes are not. The quality of faith and confidence of the individual is influenced by leadership, by the understanding of principles, and by the organization of which one is a part. Perhaps, indeed, our human nature is incapable of maintaining through time a given level of morale. But, whatever are the facts, it is incumbent on the manager to employ the devices of discipline, unity of command, and harmony of objective to maintain and improve the quality of his subordinates' morale because this factor may be related to their productivity.

Relation of Morale to Productivity. It has long been assumed that there is a high correlation between the morale of a work group and its productivity. However, current research leads to the conclusion that little is known for certain about such a relation.[18] There is, of course, evidence of positive correlation in the history of religion and of war, but it has not yet been proved in business enterprise because of the difficulty of developing a satisfactory measure. The present state of knowledge is summarized conveniently by one research group as follows: [19]

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[17] Cf. W. E. Hocking, *Morale and Its Enemies* (New Haven, Conn.: Yale University Press, 1918), for an exposition that is thought by many still to be the finest.

[18] It may be considered strange that engineers, personnel specialists, and industrial engineers have not investigated this relationship. The productive research has been accomplished by the industrial psychologists. For the best work in this area, see D. Katz *et al.*, *Productivity, Supervision and Morale among Railroad Workers*, Ann Arbor, Mich.: Survey Research Center, Institute for Social Research, University of Michigan, 1951); M. Haire and J. S. Gottsdanker, "Factors Influencing Industrial Morale," *Personnel*, May, 1951; I. R. Weschler, M. Kahane, and R. Tannenbaum, "Job Satisfaction, Productivity, and Morale: A Case Study," *Occupational Psychology*, vol. 26, no. 1 (January, 1952), and L. R. Tripp (ed.), *Industrial Productivity* (Champaign, Ill.: Industrial Relations Research Association, 1951).

[19] Weschler, Kahane, and Tannenbaum, *op. cit.*, p. 7.

One of the most important hypotheses which has been largely substantiated by the Michigan group holds that high productivity is not necessarily a function of job satisfaction or morale. If we distinguish between organizational goals and personal goals, then those people who find satisfaction of their own personal needs by meeting the goals of the organization for which they work are more likely to be highly productive. It is, however, possible for people to be satisfied with their jobs although they contribute little toward meeting the goals of their organization. It is also possible for a group of employees to have high morale because they are able to accomplish group goals, although these are not necessarily related to productivity.

Indeed, morale is not even mentioned as a factor in stimulating productivity by J. M. Juran.[20] He stresses the point that managers give altogether too much attention to the individual productivity of subordinates. He feels that "in larger enterprises, the limiting factor in productivity lies in management controls." [21] In the language of the manager this means that businessmen should concentrate on the effectiveness with which the executive functions are carried out. Efficient operation in these terms will inevitably make the whole enterprise more productive, and in such an environment the productivity of the individual worker will take care of itself.

The Nature of an Order

An order is an important device employed by managers in the direction of their immediate subordinates. It is the specific means by which an activity is initiated and modified, a technique employed to "start the wheels," the original impetus by which an organization is activated. A thorough understanding of its meaning, uses, and limitations is essential to every manager.

Definition of an order. The term "order" has a large number of connotations, as a reference to any standard dictionary will confirm. As a directional device, an order is understood by businessmen to be a command of a superior requiring a subordinate to act or to refrain from acting in a given circumstance. There are several elements in this definition that require clarification. An order implies an interpersonal relationship between a superior and his subordinate in a direct line of command from the former to the latter. The relationship is not reversible. Neither may it exist between two managers of equal rank. And, except in the case of functional authority, the relationship cannot exist between a superior in one department and a person of lower rank in another section.

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[20] Tripp, *op. cit.*, pp. 76–93.

[21] *Ibid.*, p. 84.

Another implied characteristic of this definition is that the subject matter must be pertinent to the activities that are considered germane to the achievement of the enterprise purpose. Just what this includes is not always clear. On the one hand, there is no question but that a production manager may have his foremen work a nine-hour shift. But, on the other hand, there may be a real question whether foremen can be ordered to refrain from fraternizing with their employees, or whether a sales manager can require his advertising head to misrepresent a product. Orders of this type are frequently given and are almost as frequently obeyed, despite the fact that repercussions can be most unfortunate for everyone concerned.

Finally, the definition of an order implies that it is enforceable. The manager is one who gets things done through people, but his position would be untenable if, as a last resort, he could not employ sanctions against a subordinate who either refuses to carry out an order or who does so in an inappropriate manner. The ultimate sanction is the loss of a job. But before this stage is reached, there are many intermediate steps that may be taken, such as company requirements for hearings or possibility of transfer to other departments.

The right to command. In American enterprises, the right to command proceeds from a legally enforceable contract involving the personal services of subordinates. The superior alone possesses this right. He employs the subordinate to perform certain duties. The former undertakes to explain what is needed and to pay for the service as or after it is accomplished; the latter undertakes the specified activities and receives his remuneration. It is entirely immaterial which party took the initiative in suggesting an agreement. The contract will still provide that the employer give the orders and the employee obey them.

The issuance of an order. The techniques of issuing orders are matters that have received very little consideration in the management literature, although the military establishment has given the problem considerable attention.[22] Among the points of interest that are considered here are the generality of an order, its written or oral form, and the degree of formality attending its issuance.

Whether an order should be specific or general in nature seems to depend upon the preference of the manager, his ability to foresee all the circumstances that accompany a given activity, and the response made by the subordinate. Managers who have a rigid view of delegation of authority seem to be predisposed to phrase an order in specific terms. They feel that they have clearly in mind just what is to be done and the best way to accomplish the purpose. And, what is more, they consider that the subordinate should perform the task in this manner. Consequently, such managers prefer to direct their subordinates very closely, and one means is to give specific orders.

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[22] Beishline, *op. cit.*, Chap. 14.

In situations where it is not possible to foresee all the attendant circumstances that may influence the way in which an activity is undertaken, the order is more likely to take a general form. When the duty must be accomplished far from the personal direction of the superior, it is quite essential that no effort be made to give specific orders. For instance, district sales managers, regional plant managers, and representatives located at a distance from the home office are, perforce, likely to operate under general orders, for the reasons that local influences, unforeseen factors in a negotiation, and other questions may affect the way in which the assigned activity is to be carried out.

The response of a subordinate to the type of order received is also an important factor in determining its nature. Some employees, as we have seen, prefer close supervision and consequently do best under specific orders. On the other hand, many subordinates will chafe under this treatment. They prefer to exercise their own initiative and creativeness and are quite willing to be judged by results. This type of person does not work well under close direction and tends to resent orders that are considered to be too specific.

The preference for written or oral orders takes into consideration such questions as the permanency of the relationship between superior and subordinate, the quality of trust that exists between them, and the necessity of some device, especially in large-scale firms, for avoiding overlap and acquainting personnel with the fact that an assignment has been made. If it were safe to assume that the superior-subordinate relationship would continue between two particular persons, it would often be unnecessary to reduce orders to writing. But because of the high degree of mobility that characterizes most persons in associative endeavor, it is unsafe for a firm to operate without written orders, at least on those duties that are intended to pertain to the job, rather than to the man, and on those that will take considerable time to accomplish. For example, the practice of shifting officers in the armed forces at frequent intervals is well known. But equally disturbing is the turnover in the managerial personnel of larger enterprises such as business, education, religion, and government.

The influence of the quality of trust that exists between superior and subordinate upon the desirability of writing orders is pervasive. Since, in this relationship, the major risk is carried by the subordinate, he may prefer written orders for several reasons. He may be averse to accepting responsibility and, when this is forced upon him, want to be covered by a written as well as a specific order. The subordinate may remember being accused of exceeding his authority at some time in the past and will now insist upon the protection of a written order. Or he may have had a bitter past experience with a superior who fails to remember giving an order, who changes an order and forgets that he has done so, or who blames the subordinate for poor results attendant upon carrying out his orders.

The written order is often essential for preventing overlapping instructions and acquainting personnel of a particular assignment. The first matter is important because the written order helps in preventing jurisdictional disputes. The superior is more likely to avoid an overlap if his orders are written. And if, perchance, confusion develops, it is considerably easier to straighten out if the original orders were in writing. In addition, it is often convenient to communicate the knowledge of a particular assignment to all interested personnel by the publication of a written order. The need to do this arises particularly when a subordinate is instructed to undertake an action or a study beyond the limits of his usual assignment. A president may instruct his personnel director to make a study of accidents, their causes and incidence, and develop a program for minimizing them. Should no public notice be given and no special instructions requesting the cooperation of all division, department, and section heads be made public, it is quite possible that such an undertaking would meet with resistance, sabotage, and a general lack of cooperation.

The formality with which an order is given depends largely upon whether it is written or oral. Written orders are ordinarily quite formal because it is necessary to achieve a degree of exactitude in this type of communication. But the point should be emphasized that in most enterprises, usually exclusive of the military establishment, such terms as "command" or "order" are rarely used. Consequently, it is likely that, especially among businessmen, the emphasis placed upon command may seem unrealistic. Certainly it is true that the great bulk of orders in most enterprises is unwritten. And it is equally certain that they are given informally. The manager is accustomed to command by suggesting, "Let's do this," "Suppose you go ahead with this thing," or "Why not confer with production on this?" To an outsider it may be difficult to recognize the order in such phraseology. But the subordinate seldom mistakes it.

Timing of an order. Contrary to the military practice of giving great attention to the timing of orders, the informality by which businessmen reach decisions and give orders tends to result in apparently little attention to timing. This inattention can be deceptive. If decisions are customarily reached after permitting broad participation by subordinates, relatively little explanation needs to be given, and the orders to implement action are often implied. There is also the situation in which a business is operated on the basis of opportunism and immediacy. In these circumstances, timing is probably simultaneous with the decision. On the other hand, a firm that engages in considerable forward planning will necessarily have to follow the steps in the plan quite rigidly. In such an instance, the matter of timing orders is given careful attention.

SELECTED REFERENCES

Beishline, J. R., *Military Management for National Defense,* pp. 200–204. New York: Prentice-Hall, Inc., 1950.

Fayol, H., *General and Industrial Management,* pp. 21–26, 98–106. New York: Pitman Publishing Corporation, 1949.

Haire, M., and J. S. Gottsdanker, "Factors Influencing Industrial Morale," *Personnel,* vol. 27, no. 6, pp. 445–454 (May, 1951).

Hocking, W. E., *Morale and Its Enemies.* New Haven, Conn.: Yale University Press, 1918.

Learned, E. P., D. N. Ulrich, and D. R. Booz, *Executive Action,* Chap. 6. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1951.

Tripp, L. R. (ed.), *Industrial Productivity.* Champaign, Ill.: Industrial Relations Research Association, 1951.

Gulick, L., and L. Urwick (eds.), *Papers on the Science of Administration,* Chap. 5. New York: Institute of Public Administration, 1937.

MOTIVES
1. PHYSICAL & WELFARE NEEDS
2. PERSONAL DEVELOPMENT NEEDS
3. DESIRE FOR ACHIEVEMENT
4. DESIRE FOR ACTIVITY, VARIETY, NOVELTY
5. NEED FOR RELEASE FROM EMOTIONAL RELEASE
6. NEED FOR SECURITY OF STATUS . . .
(7 NEED FOR ~~[illegible]~~ GROUP PARTICIPATION
8 NEED FOR SENSE OF PERSONAL WORTH)
9. NEED FOR SENSE Participation

19

MANAGERIAL APPROACHES TO DIRECTION

The executive function of direction embraces the practical problems involved in getting people to work as a team in the accomplishment of the group objective. Basically, therefore, the issues of direction are concerned with managing human behavior. As Herbert A. Simon has said, "The behavior of individuals is the tool with which organization achieves its purposes." [1]

It is incumbent upon the superior manager to mold the activities of his subordinates in such a way that they coordinate effectively the work of their own department or division, cooperate sincerely with others in the enterprise, and live up to socially approved standards of conduct both on and off the job. All approaches to direction are ultimately concerned with influencing the behavior of subordinates to conform with these requirements. To be successful, the manager needs to be adept in the skills of leadership. He helps to make coordination effective by good organizing, planning, and staffing. He is concerned with motivating his subordinates in ways which are attuned to their needs and which promote the accomplishment of the enterprise objective.

Thus, the approaches to direction—to guiding and supervising subordinates—are extremely diverse. There are not only good and bad practices but there are several degrees of each. It behooves the manager to understand them, to select the most effective as well as the most appropriate, and to personalize his contacts with subordinates.

Prerequisites in Direction of Subordinates

The techniques selected by the manager in the direction of subordinates necessarily rest upon a foundation of prior conditions. Making certain that such prerequisites are fulfilled is simply a short cut to dealing effectively with an actual situation. If the prior favorable circumstances or conditions fail of realization, a considerable amount of repetitious training is always essential in any approach to a practical problem. Furthermore, it is not proper to assume that, once these conditions are fulfilled, they may be safely ignored.

All the prerequisites are comprised of information to be passed on to subordinates or of molding the environment for the better accomplishment of coordination. The former are included because it is assumed that subordinates in possession of the "reason why" can be more easily motivated than those kept ignorant of such matters. The latter prerequisites are important because they facilitate teamwork.

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[1] Herbert A. Simon, *Administrative Behavior* (New York: The Macmillan Company, 1949), p. 108.

Understanding the environment of decisions. One of the most common complaints from subordinates concerns the failure, on the part of superior managers, to keep them informed about the forces with which the firm is contending and the reasons for a change in policy, organization, program, or any other matter reflecting a new decision of higher management. This feeling of being kept in the dark has nothing to do with information that really must be withheld. Subordinates can understand the need for confidence with respect to certain enterprise policies. But they have a real complaint when a superior is afraid or simply neglects to communicate nonconfidential background knowledge that would enable them to understand new decisions.

However, the purpose of such communication is not merely one of satisfying a natural curiosity. It is, rather, to brief the subordinates so that the action expected of them will be more effective in achieving the purposes of the department or division. The need for such briefing has been amply demonstrated. Even our armed forces, traditionally conservative, made it a point to explain to troops the reason for undertaking a particular action in World War II.

The forces that have made it fruitful for managers to explain the environment of decision making to subordinates are in many ways peculiarly American. The personal attributes of people, particularly subordinate managers, important in this connection are their educational level, their belief in democratic action, and their insistence that human dignity be respected. The managers in the lower and middle levels of enterprises have often received more formal education than their superiors. Many have learned something about group power in the democratic environment of our colleges and universities. And the latter have recently tended to stress the importance of human relations. Hence, it may not be too much to say that the training of our youth has conditioned them to resent any dictatorial or take-it-or-leave-it attitude on the part of anyone in our society.

Understanding the environment of decision has many practical advantages, regardless of the level of education of subordinates or of their attitudes toward dignity of the individual. Unless one understands the reasons for a course of action, he often does not see why it should be done in a certain way and may resent the course taken. It is difficult to draw plans so completely or to make instructions in such detail that room is not left for the play of individual judgment. Only in understanding as thoroughly as possible the environment in which the course of action is placed and the reasons for the decisions taken can the individual subordinate manager be able to make his plans in the most efficient and effective manner.

The importance of this understanding by subordinates is often overlooked by top managers. In their preoccupation with gaining a strategic advantage over competitors, to make the best possible deal with a vendor, or to proceed without interference from both inside and outside forces, these managers who determine major policy often feel that underlying considerations or strategies should be kept confidential. It seldom occurs to them to weigh the advantages of maintaining secrecy against the disadvantages from loss in efficiency and morale by uninformed subordinates. If secrecy were so weighed, there is little doubt that fewer matters would be regarded as confidential or secret, either in business or military organizations.

Interpretation of authority relationships. The superior manager who makes certain that his subordinates understand the different types of authority is able to obviate many difficult situations that commonly occur in the interrelationships of individuals. This is not merely a matter of putting into the hands of subordinates the organization chart and statements of the assigned duties and delegated authority of the enterprise managers but of differentiating for subordinates the various types and reaches of authority and teaching them the kinds of approved behavior that pertain thereto.

Subordinates benefit from an understanding of the principle of unity of command and its violation by those who possess functional authority. The subordinate himself may be in the position of receiving all his assignments and authority from his own superior. Alternatively, there may be some areas in which some other manager has the right to specify, through functional authority, how another's subordinates are to carry out certain activities. Similarly, subordinates of a manager with functional authority may be in a comparable position by virtue of the established authority relationships already existing in the organization structure. It is clearly important to have these matters pointed out so that future misunderstandings may be avoided.

A point that is not often clear concerns the depth of a manager's authority. Managers with line authority often fail to understand that it penetrates only to their immediate subordinates, not to the subordinates of the men who report directly. For example, the production manager to whom the purchasing agent reports has no authority over the latter's subordinates. They, like everyone else, are always subject to applicable company rules and policies. But beyond this they properly look to the purchasing agent for direction.

The superior, particularly at higher organization levels, will find it desirable to explain the concept of implied authority to his subordinates. The point has been made previously that in the delegation of authority it is difficult to foresee all circumstances in which the superior will want his subordinate to take action. As a consequence, managers are expected to act in a reasonable manner to protect the interests of the firm, whether the particular point has been covered in their authority delegations or not. Business is based upon trust, and managers who are well chosen in the first place simply must be trusted by their superiors to act in good faith in a common-sense manner.

The difference between line and staff authority is also a potential cause of considerable misunderstanding unless it is clarified for subordinate managers. When one has authority to command and when to advise others is a matter of basic importance. The subordinate needs to know not only which type of authority he possesses: in a given case he needs also to know which type other managers possess. Perhaps of equal importance is the matter of how to employ the particular type of authority possessed and how to utilize the services of others with these kinds of authority. Thus, the subordinate in the staff department should be instructed carefully about the nature of his dealings with personnel in other divisions. He should realize that his usefulness depends upon the effective advice he can give to other departments, preferably upon their request. On the other hand, if the subordinate is in a line position, he should be carefully instructed to request and listen to staff advice freely and fully.

Interpretation of policies, procedures, and programs. Superior managers find that a common understanding of policies, procedures, and programs by their subordinates keeps them from embarking on duplicative and uncoordinated activities. Whether the policies have been determined by others or adopted by the individual department head, their varied interpretation by subordinates is a common source of confusion. It is extremely difficult to present policies and programs in unambiguous terms. It is equally difficult for subordinates to achieve a common understanding of them by their own efforts.

In the ordinary process of carrying out policies and programs and following procedures, it is inevitable that subordinates will come upon ambiguities, contradictions, and costly practices, all of which will raise questions concerning the need for a change. Subordinates often feel frustrated in dealing with such matters. They are inclined to cut corners, to reinterpret plans, or to urge immediate modifications. The superior manager is wise to anticipate these attitudes by teaching subordinates the appropriate procedures for changing policies and programs. It is important to point out that what may seem to subordinates a desirable line to take often conflicts with interrelationships with other departments. If such is the case, it is quite apparent that no change should be made without a much broader study. It is also important to instruct subordinates in the wastes that result from taking unilateral action in modifying common practices and interpretations. On the other hand, effective direction also implies that subordinates should be encouraged to discover and report the need for changes and to go about achieving modifications in approved ways. All well-managed firms have machinery for securing flexibility in policies, procedures, and programs, and subordinates should be carefully schooled in its use.

Developing the conditions facilitating coordination among subordinates. Another prerequisite that facilitates the direction of subordinates is the presence of certain conditions that make coordination among them easy and natural. The manager who motivates his employees to achieve this state will find his directive activities considerably simplified.

Mary C. Niles has listed both the reasons why coordination is difficult to achieve and the means of realizing it.[2] Among the latter she has included almost everything a manager does. The manager can create the best conditions for securing coordination of subordinate effort if he is efficient in planning, organizing, and staffing. If these things are done well and appropriate controls are employed, the programs will be understood, the department will be organized with a view to efficient operation and good communication, and the subordinates themselves will be carefully selected and trained.

Coordination, as we have seen, is an important condition to achieve, but the manager is in no position to order it into existence. The department head, however, has other resources. He can explain to his subordinates the meaning of coordination, telling them frankly that its existence depends in part upon their willingness and sincerity. The manager, too, can provide the type of personal motivation that will encourage his subordinates to coordinate their efforts. This action is done by attaching to acts of cooperation the rewards for which the people in his department will strive.

Techniques of Direction

The guidance and supervision of subordinates is basically a problem in communication. The essential purpose of direction is to teach subordinates, give them information, oversee their work and work methods, and take such action as will improve their performance. The manager is, however, necessarily limited by available communications devices for the transmission of information. And even within these limits, his choice of technique will be affected by the personalities involved and the demands of the situation.

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[2] Mary C. Niles, *Middle Management* (New York: Harper & Brothers, 1949), p. 236.

Alternative devices of communication. The alternatives available to the manager include the transmission of information orally, by mechanical means or personal contact, or in writing. Dimock has recounted an interesting description of the manager who communicated entirely by writing to colleagues and subordinates.[3] This may be an extreme case, but it does illustrate the serious inefficiency of selecting a single method. There are obvious uses for written communication in directing subordinates. It is often wise to write out policies, decisions, procedures, and instructions, since they are frequently consulted by persons concerned, since doing so helps to retain a common understanding, and since such a practice will tend to eliminate jurisdictional and other types of disputes. But it is a technique that has serious shortcomings because of the time required, the dangers of misunderstanding, and the fact that items in writing may seem to leave little room for differences of opinion.

The more important advantages of oral communication are the saving in time and the achievement of a ready understanding. Both telephonic and face-to-face conversations reap these advantages. The effectiveness of the telephone is immeasurably increased if the persons involved already know each other well from personal acquaintance. Much business can then be quickly accomplished because the parties will be able to visualize each other. Misunderstandings often occur, nevertheless, even in person-to-person contacts. These may be due to the shallowness of personal knowledge, semantic difficulties, or hesitancies caused by differences in status. However, there is no better method to destroy these blocks than direct conversation. In fact, many persons have insisted that it is not the words so much as the light in one's eye that reflects the degree of understanding.

Classes of supervisory techniques.[4] There are three broad classes of supervisory techniques. They may be described as the consultative, the autocratic, and the free-rein methods. In employing the consultative devices, the manager adopts the view that the encouragement of maximum participation by subordinates in matters that relate to departmental functions will produce the best results. He is by no means committed to adopting the suggestions of subordinates, although there should be an eagerness to do so if they have merit. But the stress is laid upon the democratic behavior of the manager, his sincerity in implicating his subordinates in departmental plans, and his stress on group action. In utilizing the consultative technique, the manager is sometimes thought of as a moderator drawing ideas and suggestions from his group of subordinates.

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[3] M. E. Dimock, *The Executive in Action* (New York: Harper & Brothers, 1945), p. 154.

[4] The classification and description of techniques in this section reflect the influence of numerous writers with backgrounds of sociology, social psychology, and political science. For a popular presentation, see a series of four articles by A. Uris in *Factory Management and Maintenance*, vols. 109–112, nos. 7–10 (July–October, 1951).

The techniques associated with the autocratic method of direction develop naturally from a belief, on the part of the manager, that he should assume full responsibility for all action by subordinates. Indeed, he sometimes believes that subordinates cannot be trusted to act for themselves. The source of this conviction may rest in the personality of the superior, although it may result from experience with subordinates whose personal and educational attributes make an autocratic approach necessary.

The free-rein techniques are based upon quite the opposite assumptions. The manager views his job primarily as one of developing the potentialities of his subordinates through allowing them independence and permitting each to exercise power and ingenuity in handling assignments. Such managers consider their directive function to be mainly one of acting as a coordinator of information and a teacher. They emphasize the general guidance of subordinates—making clear only the broad limitations of policy and the requirements of programs and procedures.

As the manager considers these various techniques, he will be impressed with two points. The first is that the classes of techniques are not mutually exclusive. Consultative methods are thus available to managers who intend to adopt either a free-rein or an autocratic attitude. It also means that sometimes circumstances will dictate an autocratic approach, even though the manager may prefer free-rein methods. For instance, situations that call for immediate action are more amenable to autocratic direction. Also, managers whose subordinates lack the self-starting qualities implicit in the consultation or free-rein techniques or have an inferior educational background are not able to utilize either of these methods effectively.

The second point relates to the predisposition of a manager to select the class of techniques that best suits his own personality. Thus, a man who is autocratic by nature, who fears and distrusts subordinates, who believes that subordinates should imitate him and his methods, or who deliberately fails to delegate authority will be predisposed to select the characteristic techniques of autocratic direction, while a manager who believes in democratic action and is anxious to develop managerial potential will very likely adopt free-rein techniques. It is a matter of pure speculation whether a person who prefers one approach or the other can actually make the transition if circumstances call for such a move.

Undoubtedly, managers can make the effort, but whether the results will be effective is quite another question.

Consultative techniques. The techniques of consultation between superior and subordinates have numerous applications. All are based upon the use of conferences for the transmission of information and understanding, and there are, as a consequence, strong overtones of democratic or team approach to departmental functions.

Informal Conferences. Called on the spur of the moment, informal conferences can be extremely useful. The types of subject matter appropriate for this directive technique include (1) securing better coordination between subordinates or between individual subordinates and personnel outside the department; (2) developing new policies; (3) developing a common interpretation of new information or ironing out diversities in the interpretation of existing programs, policies, or procedures; (4) considering the progress of a program, the current bottlenecks, and what each can do to eliminate them; (5) transmitting firsthand information to the superior; and (6) setting off a few trial balloons. The informal conference is thus most effective in cementing teamwork through the free exchange of new information and in trying out new ideas.

The chief reason for its effectiveness is the elimination of the elements of surprise and criticism. The basic assumption is that the members of the team trust and respect one another and have a high sense of their combined effectiveness. A second advantage is that such conferences are called only when the need arises and are attended only by those affected. This characteristic minimizes the use of executives' time.

Formal Conferences. The formal conference is identified by a written notification of the time and place of meeting and possibly the transmission of the agenda to members. The technique is useful at any level of the organization structure and often for nondirectional purposes. As far as the guidance of subordinates is concerned, the appropriate subject matter for formal conferences include (1) the impact on the firm of a state of preparedness or war; (2) explanation of new, official policies relating to the expansion or contraction of business, addition of new lines, profit sharing, and the like; (3) explanation of new programs, such as the sales and financial budgets; (4) explanation of changes in the organization structure; and (5) information to all members of a department about the status of programs.

Formal conferences are called whenever the need arises and are not held without a specific purpose in mind. The scope of such a conference depends upon the persons affected. For instance, the president may wish to explain a new personnel policy to managers at all levels of the structure, or a department head may wish to review progress with all his subordinate personnel. In the former case, the publication of a new policy is the occasion for a special meeting. In the latter case, section and division heads may hold such conferences on predetermined dates.

Fundamentally, the occasion for using formal conferences is utilized to give information and to permit questions from listeners. Thus, the chief advantages of this technique are economy of time in giving information and superior effectiveness of direct communication. The alternatives of written explanations or oral transmission of information through successive explanations at various levels of the organization structure are clearly inferior methods of guidance.

Consultative Techniques and the Individual. Although the consultative technique usually operates through groups, its essential characteristics may be found in direction of the individual. The superior who asks for advice, who suggests a course of action, who persuades, or who welcomes suggestions from an individual subordinate is utilizing the consultative technique. While this technique can be so extensively used that individual subordinates may begin to wonder whether their superior has a plan, an opinion, or an intelligent approach to his job, the fact still remains that most individuals dislike being ordered and most feel a sense of status when their suggestions are considered and solicited. The desire to be recognized and the understandable belief on the part of individuals that they know the best way are natural qualities of egoistic self-interest. By using the consultative technique, the manager often develops morale not otherwise possible and often receives information genuinely helpful in accomplishing desired ends.

Advantages and Disadvantages of the Consultative Method. The particular advantages of each technique have been suggested above. Perhaps their peculiar effectiveness in getting people acquainted with superiors far removed organizationally should also be stressed. For instance, the authors have noted that, when a general conference of managers has the opportunity to hear and see the president and other top officials of a large firm, they acquire an understanding, not only of business problems and policies, but of the forces that molded the decisions eventually taken. And they also obtain bits of valuable personal knowledge about executives whom they may never otherwise see. The foibles of the great, their virtues, and sometimes their petty vices, become general knowledge and have a powerful humanizing influence. Indeed, so effective is this use of management conferences that it is a wonder more firms do not seize upon it.

The disadvantage of conferences tends to cluster around their misuse and the inability of superiors to employ them effectively. The subject matter, as has been suggested, must be appropriate. These directive devices would be employed in vain if their purpose was to formulate policy, procedures, or programs; settle upon the sales and financial budget; or deal with individual personnel problems. Vital as these matters are, they must be handled by other means.

The second shortcoming is derived from the inexpert handling of a conference by the superior managers in question. Great skill is required to achieve the particular purpose. Any hint of autocracy, criticism, lack of respect for members, or secrecy is quite sufficient to destroy the effectiveness of these techniques. The manager needs leadership experience in gaining cooperation, the skills of a professional teacher, and the conviction that democratic participation pays off.

Autocratic techniques. Autocratic techniques derive from the conviction on the part of the manager that his subordinates should not be permitted any freedom to act without specific approval. As a consequence, the particular techniques characteristic of this kind of direction include the retention of power in the hands of the manager, reliance upon commands or orders carrying minute and specific instructions, and maintenance of close supervision.

Parsimonious Delegation of Authority. The manager who chooses to direct subordinates in an autocratic fashion takes a dim view of delegating authority. He is, in fact, determined not to delegate any at all if he can help it. He may thus reap certain important advantages. He will be able to make quick decisions. Many subordinates fear to exercise authority and, far from being disgruntled, will be most happy to have none. And it is possible to use subordinates who are without the personal and experience qualifications demanded by other techniques. The disadvantages are the obverse of these. While a decision can be quickly reached once attention is given to the matter, the manager who insists upon making all decisions is certain to cause many delays through sheer lack of time to attend to multitudinous affairs. His subordinates who chafe under the lack of delegated authority are likely to leave the firm as quickly as possible and thus contribute to the costs of high turnover. Purely in terms of productivity, it is questionable whether the firm whose employees are autocratically directed can compete with another that receives less restricted direction.

Reliance upon Orders. The manager who selects autocratic methods of direction will rely upon formal order giving. He substitutes commands for the more informal technique of doing a job together. It may be argued, of course, that the net effect is the same. But order giving carries overtones of marked superior-subordinate relationships. It never lets subordinates forget who is the boss, a fact that can become quite irksome to people who have been raised in the democratic tradition and who have attained high educational levels. However, order giving can also be extremely effective in getting action from a subordinate who prefers to avoid responsibility.

Giving Minute and Specific Instructions. Along with the centralization of authority and the use of commands, the autocratic direction of subordinates involves the technique of detailed instructions. Here again, the lack of trust exhibited by the manager becomes evident. He does not wish his subordinates to try various methods or use their imagination and creativeness in accomplishing a job. He takes the position that the best method is the one specified in the assignment. And he may be right. There are many types of jobs that can be accomplished in one best way, particularly those carefully studied by time and motion experts. In such an area there is simply no room for personal predilection. Furthermore, the same factors hold in such jobs as loading a ship, laying a pipeline, and keeping records. There is also the possibility that subordinates simply have no experience in the activity and require specific instructions in order to get a job done. The use of coolies in the construction of American railroads about a hundred years ago is a case in point. Today, farmers in fruit, sugar cane, and vegetable-growing regions find that they must give minute instructions to laborers imported from the West Indies.

If the subordinates are managers in their own right, these advantages tend to disappear quickly. Those who are qualified to occupy such positions will be as quick to resent minute instructions as they are to take issue with tendencies of their superiors to hoard authority. Nothing, it seems, can kill off initiative and productivity as quickly as the tendency to issue detailed instructions.

Close Supervision. Autocratic methods of direction include close supervision. This technique is related to the basic lack of trust exhibited by the superior manager. Attention of such a nature is valued by those subordinates who prefer their superiors to direct autocratically. But, by the same token, it is resented by those who object to the evident lack of trust that close supervision implies.

Conclusion. The original selection of autocratic directional techniques reflects the personal choice of the manager. It may rest upon his personality, or it may be forced as a result of circumstances. It is probable that in the United States it is a mistake to select as a manager any person who prefers exclusive application of autocratic methods. This conclusion rests upon the acknowledgment of our high standards of literacy, mobility of personnel, and our commitment to democratic methods. Unless it can be shown that the subordinates in a department actually prefer autocratic direction, the use of such techniques should be shunned except in a few cases.

There are times, however, when the most democratically inclined manager should use autocratic methods of direction. When a completely uniform policy is necessary in an enterprise, there may be little room to allow for consultation or free-rein techniques. For example, in matters affecting integrity of accounts, the accounting for cash, or conformance with laws and contracts, the manager may find that his only practicable course of action is to dictate the behavior of subordinates. Also, in matters of safety or in cases of danger or crisis, the positive hand of the autocratic technique must be placed on subordinates. No manager would think of consulting with his subordinates on the advisability of smoking in the explosive atmosphere of a lacquer mixing room, of giving subordinates free rein in the event of a dangerous fire, or of consulting with a motorman as to the proper speed to operate a streetcar in city traffic.

Furthermore, the implications of autocratic methods for various types of personality cannot be overlooked. Not only may the uneducated and timid react best to autocratic methods, but often hostile or overly aggressive individuals require the firm hand of the strong manager. Moreover, there are times when the head of a firm or department must adopt a definite and positive course of action, with or without consultation with subordinates. Where a group is emotionally upset or where strong leadership can bring order out of a chaotic situation, the manager may find that a sense of positiveness and a heightening of morale will result from the firmness and definiteness of autocratic techniques.

Free-rein techniques. The techniques developed by managers who select the free-rein method of direction emerge naturally from the primary purpose of encouraging individuals to develop and contribute independent thought and action to the attainment of enterprise goals. Such a contribution does not mean, of course, that the functions of the department are neglected: subordinates who receive this encouragement, if properly selected in the first place, are not inferior producers. But it does mean the giving of encouragement to personal initiative and to the acquisition of experience by independence. Perhaps nowhere is the free-rein technique more useful than in developing managers, for experience, as independent as possible, in decision making is essential to this process.

Willingness to Delegate Authority. Since managers learn by doing, a characteristic of free-rein direction is the willingness of the superior to delegate authority to his subordinates as quickly as they demonstrate a capacity to use it effectively. Thus, the typical situation in a department that receives this type of direction is that subordinates will be in all stages of development. No bundle of authority is delegated to a new man. Rather, the authority may be highly restricted in the beginning but gradually expanded as he proves his ability to work intelligently.

The advantages of this technique reflect the full power of the trust exhibited by the superior in his subordinates. The latter, anxious to take advantage of their opportunities, will respond with maximum effort, will give free rein to their initiative and creative imagination, and will almost certainly be careful not to let their boss down. On the other hand, disadvantages result from the time subordinates take to reach decisions and the amount of fumbling and wrong decisions that may be encountered.

Generality of Instructions. The managers who believe in free-rein direction are prone to make assignments of duties in a general rather than a specific manner. For instance, the sales manager has a choice between assigning to a subordinate the development of a sales forecast and giving detailed instructions to the subordinate about data, sources, and techniques. The first alternative leaves to the subordinate all decisions relating to the accomplishment of the work, while the second deprives him of initiative, application of new techniques, and a creative approach.

The particular merit of giving instructions in a general way is that the subordinate is forced to think for himself. He learns the rudiments of managing a project—the planning, organizing, assigning of duties to his subordinates, and directing and controlling them. He grows in self-reliance and assurance, finds applications for new ideas, and, from the later evaluation of his work, develops common sense or judgment.

Unobtrusive Supervision. There need be no neglect of supervision of subordinates by the superior who follows free-rein methods. The difference lies in the frequency of checking up and the means employed. The fact that a maximum of freedom is extended to the subordinate to reach his own decisions and select his own procedures implies that any interference should be kept to a minimum. On the other hand, a superior who keeps his ear to the ground and moves about his department will not fail to give adequate supervision. When the necessity arises, he will be able to pinpoint his observations, and at the same time exercise his supervisory powers, while talking over problems and reviewing the work of individual subordinates.

Open-door Communication. The various techniques of free-rein direction would be unsuccessful if the superior were to fail to keep himself available to his subordinates. The initiative must be left to the latter to seek the boss for the purpose of clarifying ideas. The subordinate is certain to run into problems relating to methodology, personalities, and limitations of freedom imposed by top policies and traditions. Discussion of these matters with his superior is a most helpful means of clarifying his own thinking and of getting information. The function of the superior in these situations is to act as a sounding board, to recall from his personal fund of knowledge and experience, and to clarify the alternatives open to the subordinate. But at this point it is essential to stop short. The superior must refrain from telling the subordinate how to proceed. To do so would relieve the latter of the necessity of making his own decisions and would, therefore, wreck the whole edifice of free-rein direction.

Analysis of Past Decisions. Superiors who employ free-rein techniques always include among them analyses of past decisions made by subordinates. This practice involves an over-all review of an accomplished assignment with the subordinates, with the purpose of setting forth available alternatives, the reasons for the actual decisions made, and the evaluation of results. This is literally teaching by the case method. In these discussions all matters are approached objectively. Criticism of the subordinate has no place here, except perhaps his own self-criticism as he sees mistakes he made in planning, in his methodology, or in his evaluation of environmental factors.

This technique is an essential capstone to the whole free-rein directional method. It is most valuable to the subordinate. He can feel himself grow in judgment and in self-confidence. And at the same time it gives an opportunity for summarizing the lessons to be learned from the assignment. It also enables the superior to determine the growth of his subordinate. On the basis of this evaluation he can decide whether the subordinate merits a further grant of authority, whether he needs seasoning in certain types of assignments, and whether he should be given a bit more supervision.

Conclusion. Free-rein direction can be an extremely effective method of guiding and supervising subordinates at any time, particularly the highly educated individualist, the scientist, or the brilliant prima donna. The basic prerequisite to its employment is the presence of superiors and subordinates who are psychologically adjusted to the uses of freedom. Superiors who hold a rigid view on the delegation of authority are notoriously frustrated by such a method. Similarly, subordinates who prefer to avoid responsibility would be most unhappy with free-rein direction. If the right types of persons are involved, the success of this method depends upon having superiors with immense patience, teaching ability and forbearance. It also requires that the organization of the department be such that the mistakes inevitably made by subordinates will be small ones. For it is of first-rate importance that the younger men gain their experience under conditions that will minimize the risk to the firm.

The importance of free communication. The provision for and encouragement of free communication in the exercise of the directive function obviously depend upon the method selected by the manager. One of the shortcomings of much current writing on communication is the assumption that free communication "ought" to be encouraged.[5] The discussion in preceding sections has high-lighted the fact that a given manager may select the authoritarian method of direction; if he does, he has little use for any but downward communication. But, on the other hand, the manager who believes in democratic methods and free-rein techniques of direction necessarily is committed to open and free multidirectional communication. His basic objective is to encourage the development of subordinates and to tie in their participation with departmental plans. To do this, he must reach a firm basis of understanding with subordinates, getting to know them well, and demonstrating sincerity, trust, and fairness. The test of success is that subordinates "perceive the boss as an aid rather than as a threat." [6] Under the influence of this attitude the stage is set for really free communication, the primary requirement for successful direction by democratic means.

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[5] Cf. E. P. Learned, D. N. Ulrich, and D. R. Booz, *Executive Action* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1951), Chaps. 6, 7; Simon, *op. cit.*, Chap. 8; and M. L. Mace, *The Growth*

Crosswise Relationships [7]

Crosswise relationships occur in any organized enterprise between the subordinates of a given manager and the personnel in other divisions who may occupy positions of equal, lower, or superior status. Direct communication of this type is a substitute for following the chain of command upward through one or more superiors, horizontally across a level of organization, and thence downward to the individual in question. Enterprises simply could not operate in such stilted fashion because the communication time would be excessively long and the quality of understanding would be inferior. The proper safeguards to crosswise communication are (1) an understanding between superiors that crosswise relationships will be encouraged; (2) an understanding that unauthorized subordinates will refrain from making policy commitments; and (3) an understanding that subordinates will keep their superiors informed of their interdepartmental business contacts.

Every manager is responsible for the direction of subordinates in their conduct of crosswise relationships. In addition to their objectives of getting the work done and developing potential managers, the division heads are conscious of the impact that crosswise relationships may have on themselves. Every time a subordinate communicates in this fashion, his superior is being evaluated by others. His colleagues and their subordinates reach conclusions about the superior's efficiency as a manager, the quality of his directive skill, the worth of the subordinates he has chosen,

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and Development of Executives (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1950), Chap. 6. On the other hand, the alternatives available to the executives are emphasized in A. W. Gouldner (ed.), *Studies in Leadership* (New York: Harper & Brothers, 1950), Part III.

[6] Learned, Ulrich, and Booz, *op. cit.*, p. 108.

[7] For a good discussion of this subject, see Niles, *op. cit.*, Chap. 4.

and the way he has planned and organized his work. In such circumstances, the superior may feel quite as helpless as a parent who wants his child to make a good impression on friends and who yet is unable to exercise full anticipatory control.

Organization and its impact on crosswise relationships. All issues involving crosswise relationships arise because enterprise is organized. Grouping activities into departments automatically creates barriers to free communication between personnel and provides numerous points of friction. The proliferation of subdivisions based on geographic, product-line, or customer classifications, on the one hand, and the multiplication of staff and service groups, on the other, are the main reasons that barriers arise to interfere with direct communication. People do not have the time to become acquainted with the organization structure or with one another, and, as a consequence, they develop group loyalties that breed intolerance and untoward rivalry. But since it is essential to organize, managers hope to ameliorate the effects of these adverse forces through the direction given to subordinates in the conduct of their crosswise relationships.

Overcoming barriers to crosswise relationships. In the guidance and supervision of subordinates in their extradepartmental contacts with other persons, the superior manager attempts to anticipate probable points of friction. These tend to be concentrated in the lack of knowledge about the enterprise, in unfortunate personality clashes, and in the possibility of modifying the way activities are grouped.

Acquaintance with the Organization. Modern large-scale enterprise is complex in many ways. Getting acquainted with its objective, its structure, and the authority relationships is a task that even long-time employees never really accomplish. For the new subordinate, the prospect is indeed formidable.

Nevertheless, the superior will give careful consideration to the ways and means of making sure that subordinates master organizational relationships. The specific problem is to acquaint him, first, with the goals, plans, programs, and procedures of other divisions and, secondly, with the staff and service departments. The former is important in developing an integrated picture of the whole enterprise. The latter is vital because such knowledge will impede the tendency to duplicate such specialized functions within the department.

Several techniques are employed to accomplish the orientation of subordinates in these areas. Perhaps most commonly used are general tours and classes of instruction provided for new employees. They are given organization charts and manuals to study, are taken on tours through a firm or some of its divisions, and are grouped into classes to hear from major department heads and perhaps general officers. A second technique, widely used as a training device for junior-executive appointees, is to give subordinates rotating assignments throughout the firm for a year or so. Indeed, this technique is sometimes used in the training of middle- and senior-level managers. The obvious objective of rotation is to give the individual an opportunity to understand the purposes and procedures of other departments, the types of issues they face, and the difficulties they encounter in dealing with other organizational groups. Knowledge of these matters is highly effective in preventing the growth of suspicion and intolerance.

Attention to Human Relations. Getting along with people is an essential ability of successful persons in organized societies, particularly where the democratic traditions are strong. This point is always stressed by managers because work is accomplished by getting other persons to do it. In directing subordinates, they must place particular emphasis upon maintaining respect for the authority and personal dignity of others. One may feel that such things as kindness, thoughtfulness, and an eagerness to understand others are too obvious to mention. And yet these are the very points upon which poor personal relationships rest. Managers need to caution subordinates to clear everything with all persons who may be involved, not only as a matter of courtesy, but also to avoid presenting others with a *fait accompli,* which may or may not be workable.

An effective control on the quality of the interrelationships with others is the requirement that subordinates keep their superior informed about their dealings with other persons and their accomplishments in these areas. Periodic reports are often sufficient for the general information of the superior manager. But in matters that are especially touchy, or on subjects that require new policy formation, immediate communication with the superior is essential.

Structure Modifications. The maintenance of crosswise relationships is of immense aid in reducing the potential load carried by superior managers. But sometimes such contacts are unnecessarily time-consuming and perhaps even unnecessary. When these matters are brought to the attention of the superior, it is often possible to get the departmental processes or groups modified. For example, if the geographic factor is not carefully controlled, it can occasion much loss of time. It is often possible to achieve greater proximity of functions by simply changing a layout or by interchanging the location of particular activities. And sometimes an actual reorganization of an activity along product lines will be effective in bringing in close proximity the functions essential for its production. Of course, in such a case, many other division heads will be involved. The single superior manager will not be able to accomplish such a change himself, but he may be successful in having it accomplished by others.

Direction and the Training of Supervisors

It is probable that no single subject in the area of management has received as much attention as the training of front-line supervisors. Courses, classes, and conferences by the thousands are being carried on continuously in the hope of getting better supervision. Articles and books in large numbers appear in regular succession on this subject. The supervisor is the subject of so much continuous and varied attention and there is so much dissatisfaction evidenced with his quality that it is a wonder anyone would aspire to this position on the bottom rung of the organization structure.

Variety of approaches to supervisory training. If one may judge by the variety of approaches to this matter, he should conclude that either the issue is insoluble or that it is not understood. Perhaps the most widely used approach consists of in-plant training of supervisory groups by inside personnel. One method is to have general and divisional executives lecture on such matters as the history and objectives of the firm, enterprise policies, and functional activities. The other method is to place the responsibility for training in the hands of the personnel director. He, in turn, will organize classes and have his director of training explain similar subject matter, as well as more specific material, such as the wage structure, time and methods analysis, record keeping, and grievance procedure. The taking of these courses is presumed to prepare the new supervisor for his job.

Another approach to training consists in using the services of outsiders to accomplish much the same purpose. Such aid may come from professional consultants who give in-plant training, from the required attendance of supervisors at courses of instruction given by universities, and from private concerns that publish information generally available in public sources.

The variety of approaches and the extreme attention with which the training problem is attacked suggest that some basic elements are lacking in its handling. Three may be suggested here. In the first place, the near-universal practice of drawing front-line supervisors from among the nonmanagerial personnel has two serious implications. The trainees are often of limited formal education, and this fact has tended to make the first-line managerial positions dead-end jobs.[8] Such a probability tends to destroy incentive and make of the supervisor a half-caste whom executives would like to welcome on the management team but at the same time find it undesirable to do so. In the second place, the attempt to have people other than the immediate superior train supervisors makes it literally impossible to hold the former responsible for a good performance. And in the third place, there is an utter failure to start training at the right level. Any attempt to *begin* training at the supervisory level without having properly trained the top- and middle-management levels is foredoomed to failure. It is simply impossible to modify the behavioral patterns of subordinates without creating untold frustrations when they report to superiors who are themselves ill trained.

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[8] At the present time it is not known how many men in this classification eventually become eligible for further promotion. Informal evidence that has come to the attention of the authors points to a ratio of from 6 per cent to 25 per cent, depending upon industry classification.

A logical approach. The preceding criticisms of supervisory training practices point directly to a correct approach to the issues involved. Training must start at the top. The fact that a person occupies the position of president or major divisional head does not imply that he practices good directional techniques. Indeed, he may not know what good techniques are, or he may feel that in his position he need not pay much attention to this function. The very power of example is sufficient to encourage his subordinates to imitate him, without respect to principles.

The practice of explaining the organization structure, the objectives and history of the firm, and the competitive goals of the enterprise to new groups of supervisors is a good one. It can be done effectively by appropriate executives. New men like to hear these matters discussed by the higher officials of a firm, and it is an effective means of orienting them to the management team. Such work is essential and should be encouraged. But it should never be mistaken for training: it is an introduction to training.

And finally, since training is a significant part of the direction function, the responsibility for this work should be placed entirely upon the immediate superior. This practice has several advantages. It is possible to place the finger of responsibility accurately. The subordinate will get the kind of training his supervisor thinks he should have. And the subordinate will have an incentive to put into practice the teaching he receives. He will listen attentively, carry out an agreed course of study, and practice assiduously the lessons he has learned because his future depends upon such actions.

Giving Life to an Organization

More immediately than any other executive function, the direction of subordinates is the process through which life is breathed into an enterprise. Planning, organizing, and staffing may be envisaged as preparatory functions, control as a means of finding out what is happening. But between these activities lies direction, wherein subordinates are guided in their work and supervised as they accomplish it.

This emphasis does not subtract any measure of importance from other functions. Indeed, the methods of direction and its success are largely dependent upon the planning that has gone before, the way the organization structure was built, the qualifications of persons selected for individual jobs, and the efficiency of control measures. The special significance of direction in giving life to the enterprise lies in the continuous, direct, personal relationships that exist between superior and subordinates.

The continuing nature of direction tends to underscore the patent fact that the teaching and overseeing of subordinates are never completed. The necessity for continuous instruction derives from both internal and external forces. Often these combine, to result in changes in old plans and the formation of new ones, in frequent modifications in the organization structure, in ever-changing personnel at all levels, and in new knowledge about better control devices and direction itself. In fact, the outstanding characteristic of an enterprise is change. This factor is often overlooked by the inexperienced, who perceive a firm much like a stationary engine. But once inside a firm, the individual is more likely to be impressed by its chameleon characteristics. There are continuous and often simultaneous changes in managerial personnel, in layoffs and overtime, in plans and programs, in markets and the means of reaching them, in devices of motivation. Little wonder that someone has defined management as "just one damn thing after another." In such an environment the work of a superior is never done.

From this environment of change there emerges a continuing procession of directional problems involving human relations. Because change forces individual adjustments, it encounters at first an impassive resistance. This is a broad social phenomenon. People fear change because they naturally want to avoid the introduction of adverse forces. Not until they can assess all elements in terms of what they mean to themselves as individuals are they willing to take a stand on modifications in the *status quo*. The ultimate attitude will depend upon the probable effect each perceives for himself. Unless the change appears to harmonize with individual motives, most individuals will resist it. Some may be brought around to seeing the necessity for change or to accepting its results as the lesser of evils. Some, indeed, may refuse acceptance and leave the enterprise. The unskillful handling of such situations can easily wreck the competitive efficiency of a firm.

Direction and the Emphasis on Human Relations

It is not surprising that the current emphasis on management in general and the techniques of effective direction in particular should lead to a heavy stress on the human element in enterprise. This stress, embracing the relations of people in associative enterprise, is properly aimed at achieving effective motivation of persons and has been based largely upon expanding knowledge of individual and group psychology.

The manager's interest in this new knowledge of human relations is understandable in view of the fundamental nature of his job. The manager must understand his subordinates, both as individuals and as part of the work group. He needs to know the effectiveness of career opportunities, financial inducements, power, prestige, status, and human dignity as objectives toward which his subordinates strive. He needs to create in his department or in the enterprise as a whole, not only opportunities for realizing these goals, but also an integration of them with the objectives of the department or the enterprise. The extent to which he is successful will improve not only his human relations but also his effectiveness as a manager.

In its proper setting and perspective, the attention currently given to human relations is altogether good. However, it is possible to be carried away with new pieces of knowledge about people and to clothe human relations with exaggerated importance. If he be poorly informed or if he be carried away with sentimental concern, the manager may succumb to unsound appeals. While it is ever important to remember that human relations lie at the base of the managerial job, it must never be forgotten that, in business at least, the making of a profit through efficient servicing of customer demands is a prerequisite for the continuance of the enterprise. Consequently, the alert manager will strive to promote effective human relations, both for the welfare of the individuals concerned and for the business, without giving the company away.

Selected References

Dubin, R. (ed.), *Human Relations in Administration*, Chaps. 9, 16, 19. New York: Prentice-Hall, Inc., 1951.

Learned, E. P., D. N. Ulrich, and D. R. Booz, *Executive Action*, Chap. 12. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1951.

Metcalf, H. C., and L. Urwick (eds.), *Dynamic Administration*, Chaps. 10, 11. New York: Harper & Brothers, 1940.

Niles, M. C., *Middle Management*, Chaps. 5, 6, 13, 14. New York: Harper & Brothers, 1949.

Simon, H. A., *Administrative Behavior*, pp. 220–228. New York: The Macmillan Company, 1949.

Uris, A., and B. Shapin, *Working with People*, Chaps. 23–25. New York: The Macmillan Company, 1949.

PART FIVE

PLANNING

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THE NATURE AND PURPOSE OF PLANNING

Planning is one of the functions of the manager and, as such, involves the selection, from among alternatives, of enterprise objectives, policies, procedures, and programs. It is thus decision making affecting the future course of an enterprise.

It is sometimes said that planning is the primary managerial function which logically precedes all other functions, since, without planning, a manager would not have activities to organize, would not require a staff, would have no one to direct, and would have no need to control. However, the managerial job is actually one in which all the managerial functions take place simultaneously rather than serially.

While no manager can successfully accomplish his task unless he does all the functions well, it is nonetheless true that control is peculiarly dependent upon planning. Since control is the function of making sure that events conform to plans, no manager can control who has not planned. No one can ascertain whether he is on the correct path unless he has determined where he wishes to go. It is because of this very close relationship that these two functions of the manager are most logically grouped in the last two sections of this book.

The Concept of Planning

Planning is, as Billy E. Goetz has so effectively said, "fundamentally choosing," and "a planning problem arises when an alternative course of action is discovered."[1] If there were no alternatives in objective, policy, program, or procedure, planning would be so inflexible as hardly to exist. However, in practice there are probably few, if any, business problems for which some kind of alternative does not exist. Even in insolvent companies, which may seem to be doomed to bankruptcy, alternative courses of action are often still open. And should a company be forced into bankruptcy, there are usually legal alternatives available for accomplishing this unpleasant operation and, after bankruptcy, many alternatives for handling the bankrupt estate.

Planning is to a large extent the job of making things happen that would not otherwise occur. While seldom can the exact future of an enterprise be *made* to happen and while factors external to the firm or otherwise beyond its control may interfere with the actual operation of the best-laid plans, events, without planning, would be necessarily left to chance. Planning is thus an intellectual process, the conscious determination of courses of action, the basing of decision on purpose, facts, and considered estimates.

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[1] Billy E. Goetz, *Management Planning and Control* (New York: McGraw-Hill Book Company, Inc., 1949), p. 2.

The pervasiveness of the planning function is not often fully appreciated. One often finds a tendency among middle and lower managers to regard planning as the exclusive activity of top managers. While it is true that more preoccupation with planning is found at higher levels, largely because the area of decision making is larger, it is nonetheless a fact that any person who manages has a planning function. Even the foreman of a road gang or a factory crew, operating under fairly strict orders and procedures, plans. It is practically impossible so to encircle any delegation of authority that no area of choice remains. Within this area of choice of each manager lies *his* area of planning. As a matter of fact, it is interesting that in some of the studies of work satisfactions that have been made, one of the principal factors accounting for the success of foremen at the lowest level has been their ability to plan.[2]

The Nature and Variety of Plans

In order to appreciate the nature of plans and understand their variety in typical enterprise, one should note the major kinds of plans. They may be classified as objectives, policies, procedures, budgets, and programs.

Objectives. The basic plan is the enterprise objective or objectives. This is the goal of the firm. While these are ordinarily subject to simple statement[3] and are essential to the proper planning, organization, staffing, directing, and controlling of any enterprise or any part of it, one often finds that a business or other enterprise has not considered what its basic objectives are.

A good argument can be made that in the United States all business enterprises have one and the same objective—to make a profit. This purpose is often covered under a series of platitudinous statements having to do with service to the public and opportunity for employees. Not that these objectives are improper: certainly the business enterprise that seeks to make a profit will tend to serve the public best by producing a good for which demand exists and at a price that will effectively meet the best efforts of others. A business that seeks to make a profit will likewise tend best to serve its employees. Good wages, security, and status for the employees are gained most effectively through a financially sound enterprise, efficiently operated and managed. The common element that identifies all business enterprise, from the newsboy and peanut vendor to the largest bank or insurance company, is thus the pursuit of profit.

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[2] D. Katz, *et al.*, *Productivity, Supervision and Morale among Railroad Workers* (Ann Arbor, Mich.: Survey Research Center, Institute for Social Research, University of Michigan, 1951).

[3] For example, the *Announcement of the School of Business Administration* of the University of California at Los Angeles states that its central objective is "to provide a professional type of education for positions of administrative responsibility."

And yet, it seems inadequate to speak of profit seeking as *the* objective of business. It is almost as though one said business is business. Furthermore, there have been too many cases of business owners with incentives other than profit. They may be interested in empire building and power, social prestige, security of position, public acclaim, or any of the other strong motivations of human conduct. The business may be dominated by the desire to develop new things and try new ideas, as was the case of the owners of an engineering company with which one of the authors has worked. It may be to keep the business small, simple, and friendly, as a sort of fraternal group. Or it could be to beat their nearest, and larger, competitor, as was held to be one of the principal objectives of the Ford Motor Company in 1952. But even though enterprise purposes are stated in these or similar terms, none of them is realizable unless the firm in question actually makes a profit.

Sometimes the motive of profit maximization takes the form of enterprise-value maximization. In other words, many businesses are operated not for the maximization of profits immediately or even for the short period, but for the purpose of increasing the value of the business in the long run. Many businesses have been known to pass by profits and pursue policies that will increase the capital value of the enterprise. Unquestionably, the principal motivation for this kind of maximization for the individual is the tax structure, which places lesser taxes on capital gains than on profits or normal income. But there are many entrepreneurs who receive satisfaction from seeing a business grow large, even though profits are passed by in the process. This motivation may maximize profits in the long run, although there have been many cases where even in the long run profits are not greatest by so doing.

Another variant of the profit objective in business might be called maintenance of management security. Although evidence cannot easily be obtained on this point, since the controlling managers of a business would hesitate to admit that such is their objective, the fact is that managers sometimes follow a conservative path, which is not one that leads to maximum profits, in order to protect their position. This motive operates through an unwillingness to take even normal risks in order to gain a profit.

For example, the president of a large corporation told one of the authors that he would not approve embarking upon a certain expansion program, even though doing so promised great profits. He pointed out that, if he did not approve this expansion and the company continued to make its moderate profits, the stockholders would not feel dissatisfied and would not press for his replacement. If his conservative path led to reduction in profits, the very fact that *he* had not done anything unusual made it reasonable to blame the turn of events on external business or political conditions. On the other hand, if he took a moderate degree of risk for the promise of high profits and succeeded, stockholders would merely think that he was doing a normal job and, while being happy and content that things had turned out so well, would not especially reward him. But should he assume the risks of the expansion program and it did not turn out well, even through no fault of his own, stockholder reaction to losses might be quite adverse and he might lose his job. His reaction was, "Why take a chance? I like being president of this company!"

The motivation of management security is probably more widespread in business and more of an objective of planning than is generally realized. It is not surprising, either, when those responsible for the direction of an enterprise cannot often reap the advantages of profiting through the assumption of business risks. This motive, moreover, is not limited to persons at the top of businesses. Many department heads direct the energies of their departments toward the objective of maintaining their position as manager.

Policies. Policies are likewise plans. They are general statements, or understandings,[4] which guide or channel the thinking and action of subordinates in an enterprise or one of its departments. While a distinction has been drawn, largely for purposes of emphasis and clarification, between objectives and policies, it can be readily seen that enterprise objectives are policies, since they furnish the basic guide to thinking and action. Policies ordinarily have at least as many levels as organization, ranking from major policies applicable to the company as a whole, to major departmental policies, and to minor or derivative policies applicable to the least segment of the organization structure.

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[4] One can hardly refer to policies as simply "statements," since they are often implied from the actions of managers. While many policies are stated verbally, others grow like Topsy from one or more assorted decisions. The president of a company, for example, may strictly follow, perhaps for convenience rather than as policy, the practice of promoting from within: the practice may then be interpreted as policy and be rigorously followed by his subordinates. In fact, one of the problems of the manager is to make sure that subordinates will not interpret as policy a decision or a line of decisions made by him but which he does not intend to serve as a guide to their thinking.

The varieties of policies in practice are legion. It may be a company policy to promote from within, to conform strictly to a high standard of business ethics, to compete on a price basis, to insist on pricing at fixed prices, to foresake civilian business for military, or to shun publicity. It may be a department policy to hire only persons with an engineering background, to require strict adherence to lunch-hour schedules, or to encourage subordinates in the department freely to offer suggestions for improvement.

Policies, being guides to thinking and action, are seldom specific. It is the task of subordinates, therefore, to interpret policy through the exercise of initiative, discretion, and judgment. The amount of freedom will naturally depend upon the policy, which in turn tends to be a reflection of position in the organization structure. The president of a company with a policy of aggressive price competition has a broad area of discretion in which to interpret and apply this policy. The district sales manager of the company abides by the same basic policy, but the interpretations made by the president, the vice-president for sales, and the regional sales manager become derivative policies and tend thereby to narrow the scope of policy making of the district manager.

Policies must, however, be consistent and must be integrated in such a way as to contribute to the realization of enterprise objectives. This goal is difficult to attain for many reasons. First, policies are too seldom written, and their exact interpretations too little known. Secondly, the very delegation of authority that policy making is intended to implement leads through its decentralizing influence to widespread participation in policy making, with almost certain variations among individuals. Thirdly, it is not always easy to control policy, in the sense of comparing actual policy against intended policy, largely because actual policy may be difficult to ascertain and intended policy not always clear.

Procedures. Procedures are also plans, for they involve the selection of a course of action and apply to future activities. They detail the exact manner in which a certain activity must be accomplished. Their essence is chronological sequence. Their pervasiveness in the organization is readily apparent. The board of directors may follow procedures quite different from those of the foreman. The expense account of the vice-president may go through quite different approval processes than that of the minor salesman. The vacation and sick-leave provisions and the procedures under which they are effected may vary considerably at various levels of organization. But the important fact is that procedures exist throughout an organization, even though, as one might expect, they become more exacting and numerous in the lower levels, largely because of the necessity for more careful control, the lesser need for discretion in action or decision making, and the fact that the things done lend themselves to obtaining greater efficiency through prescription of the one best way.

Just as policies have a hierarchy of importance, so do procedures. Thus, in a typical large corporation, one may find a manual of "Corporation Standard Practice," outlining those procedures that apply to a corporation as a whole, and a manual of "Division Standard Practice," covering those procedures designed especially for division operations. There might also be special sets of procedures for a department, a branch, a section, or a unit of a business.

Procedures often cut across departmental lines. For example, the procedure for accomplishing the order handling of a product in a large manufacturing company will almost certainly encompass the sales department (for the original order), the finance department (for proper acknowledgment of receipt of funds or for credit determination of the customer), the accounting department (for recording the transaction), the production department (for order to produce or authority to release from stock), and the traffic department (for proper determination of the shipping means and route).

In comparing procedures and policies, Billy E. Goetz has said: [5]

> Policies are relatively general, reasonably permanent managerial plans. Procedures are less general but comparably permanent. A policy maps out a field of action. It determines objectives and limits the area of action. Procedures are stipulated sequences of definite acts. Procedures mark a path through the area of policy. They may fork, generally with adequate clues to determine clerical choice of the path; they may contain trivial gaps to be filled in at the discretion of a clerk; but there is little that resembles the extension of a policy. Procedures are not multidimensional; they do not cover areas of behavior; they have only chronological sequence. . . .
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> Policy always sets an objective or delimits an area of action while procedures fix a path toward the objective or through the area. Sequence is the *sine qua non* of procedure.

The relationship of procedures and policies may perhaps be indicated by a few examples. A company may have a policy of granting two weeks per year to each employee for a vacation. Procedures will be established to implement this policy, providing for scheduling of vacations to avoid disruption of work, methods and rates of pay, the maintenance of records to assure employees a vacation, and means by which an employee may apply for the vacation. Or a company may have a policy of shipping orders the day received; this policy will, of course, necessitate, particularly in a large company, careful procedures to assure that the order is handled expeditiously. A company may have a policy of requiring clearance by the public relations department of all public utterances by its employees. Naturally, to implement this policy, procedures must be established to make sure that clearance is obtained with a minimum of inconvenience and delay.

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[5] Goetz, *op. cit.*, p. 84. For an excellent study of procedures, see Richard F. Neuschel, *Streamlining Business Procedures* (New York: McGraw-Hill Book Company, Inc., 1950).

Budgets. A budget is essentially a plan, a statement of expected results expressed in numerical terms. It may be entirely expressed in financial terms, or it may be a statement of results anticipated in terms of man-hours, units of product, machine-hours, or any other measurement that can be reduced to numerical expression. A budget may be designed to deal with operations, such as the budget of expense and revenue; it may be designed to reflect expected capital outlays, such as the capital expenditures budget; or it may be formulated to show expected flow of cash, such as the cash budget.

Budgets are usually conceived as control devices, as indeed they are, and the principal discussion of them will be reserved for the chapters on control. However, the *making* of a budget is clearly planning. In fact, it is often the fundamental planning instrument in many companies. By being forced to establish for a period in advance a numerical compilation of expected cash receipts and expenditures, or anticipated expenses and revenues, or capital outlays, or man-hour and machine-hour utilization, whether the advance period is for one week or five years, a company is forced to plan. The budget cannot be used for control until it is in existence, and it cannot be in existence as a sensible standard of control unless it reflects plans.

Programs. Programs are a complex of policies and procedures, ordinarily supported by necessary capital and operating budgets and designed to put into effect a course of action. Programs may be as major as that decided upon in 1952 by the General Petroleum Company to put a 35-million-dollar refinery in the Pacific Northwest, or the five-year program embarked upon by the Ford Motor Company in 1946 to improve the status and quality of their thousands of foremen. Or they may be as minor as a program formulated by a single foreman in a parts manufacturing department of a farm machinery company to improve the morale of his workers.

While a budget of one kind or another is usually an instrument to implement a program, it may actually serve as a program. One of the authors recalls a company in difficult financial straits, which installed an elaborate budgetary-control program, designed not only to control expenditures but to instill a singular cost consciousness in the management of the firm. Furthermore, a budget may also encompass the entire program, with all other programs contained in it.

Programs may be basic, or they may be derivative, in the sense that they are required by the primary program. For example, in 1948, Trans World Airlines acquired twelve new Constellation aircraft along with necessary spare equipment, an order amounting to approximately 15 million dollars, at a time when the company's entire assets were scarcely five times as much, its cash position extremely weak, and the company itself operating at a large loss, partly because of lack of equipment. This major program required many derivative programs. A program for provisioning the airline with adequate spare parts and equipment had to be developed. Pilots and flight engineers to man the new aircraft had to be hired and trained. It was necessary to prepare and expand maintenance facilities and hire and train new maintenance personnel. Ground personnel had to be hired and trained as the new kind of aircraft was scheduled to additional cities. A revised program of schedules was developed, along with an advertising campaign to notify prospective travelers of the new service. A program for financing the purchase of the aircraft and the spares was required. New insurance commitments were necessary. These and other programs had to be devised and effected before any of the new aircraft could be received and placed in revenue service. Furthermore, all these programs necessitated coordination and timing, so that all would be accomplished at the right time, since the failure of any part of the vast network of derivative programs would delay the major program with consequent unnecessary costs. It is also worth noting that some of the programs, such as the hiring and training of new personnel, could be accomplished *too soon* as well as too late, since needless expense would have been encountered if employees had been available and trained before their services were required.

Thus, one seldom finds that a program of any importance in business planning stands by itself. It is usually a part of a complex structure of programs, depending upon some programs and affecting others. Indeed, it is this interdependence of plans which causes so much difficulty and complexity in business planning. The results of poor or inadequate planning are seldom isolated, for planning is only as effective as its weakest link. Coordinated, and hence effective, planning requires extraordinarily exacting managerial skill.

The Importance of Planning

The essential importance of planning has already been indicated. An enterprise, and every part of it, must plan if it would gain its objective or objectives. Without planning, business becomes random in nature and decisions meaningless *ad hoc* choices. It is as though an airplane pilot set out over the ocean blindfolded. Because business operates in an environment of uncertainty and change and requires the attainment of goals at the least possible costs, planning becomes a highly important function.

Planning may be likened to navigation. The navigator lays out a plan and sets a course toward an objective. But his job is not completed by so doing. Instead, he constantly rechecks his position as he proceeds toward his goal,[6] modifying his plan as errors or unforeseen circumstances prove that his course is leading to some point other than the goal sought.

Planning a necessity because of uncertainty and change. In view of the fact that the future is characterized by uncertainty and change, planning is a necessity. Just as the navigator cannot set a course once and forget about it, so the business manager cannot establish his goal as profit and let the matter rest at that. It is true that certainty may lead to the elimination of all alternative courses of action but one and thus reduce planning to the minor function of confirming an obvious course of action. But future events are seldom very certain, and the farther in the future the results of a decision must be considered, the less the certainty. Thus a business executive may feel quite certain that within the next month orders, costs, productive capacity, scheduled output, cash availability, and other factors of the business environment will be at a given level. Perhaps a fire, an unforeseen strike, or an order cancellation by a major customer may affect the actuality of these events, but in the short period this is unlikely. However, as the period for which this manager plans in advance becomes larger, the certainty of the internal and external business environment diminishes rapidly. With increased uncertainty, the possible alternatives of action become greater, and the rightness of any decision necessarily becomes less sure.

However, even where the future bears a high degree of certainty, some planning is necessary. In the first place, there are many ways to consider accomplishing an objective, and there is the necessity of selecting from among these the best way. With conditions of certainty, this kind of planning becomes primarily a mathematical problem, one of calculating which alternative course on the basis of the known facts will yield the desired results at the least costs. In the second place, when the decision as to a course of action is made, it is necessary to lay out plans or blueprints so that each segment of the business will contribute toward the job to be done.

Even though trends indicating change are easily discernible, difficult planning problems arise. The manufacture of stoves for family cooking purposes may be cited as a case in point. The change away from the use of coal and wood burners was distinct, but the change did not take place overnight. It was essential for the manufacturer of a half century ago to determine what percentage of his production should be assigned to the new burners and what to the old; it was also important to produce new burners in such a way as to retain efficient production of both lines. But there came a time when the small declining business of old burners became uneconomical. This was an obvious cutoff point. However, the manufacturer could have chosen an entirely different plan. Having satisfied himself with the certainty of change, he might have deliberately sacrificed some old-burner business in order to concentrate on the design and development of new burners, with the hope of becoming the leader among gas- and electric-stove manufacturers.

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[6] As the reader will readily understand, this constant rechecking is similar to the management function of control.

Where trends are not discernible, uncertainty is greatest. Many businessmen missed the significance of heavy government expenditures, pent-up demand, extensive savings, and rapid population growth, with their effect on the course of business following World War II. The recession expected by many did not occur, with the result that many firms missed opportunities for profit through underexpansion of capital facilities and lack of readiness for new markets.

It has sometimes been objected that planning in the face of great uncertainty is wasteful because plans must be changed continually and the margin of error is likely to be great. But, just as the navigator must premise some kind of winds in order to make a start toward his goal and must make corrections as necessary, the businessman must make his decisions against some kind of assumption as to the future. The existence of uncertainty implies, not only that the manager must be alert to necessary changes in his plans as changes become discernible, but also that he would prefer to avoid making decisions that tie him irretrievably for a long period of time to a given course of action.

Planning focuses attention on the enterprise objective. Because the enterprise objectives serve as the goal of all activity and the end of all planning, the very act of planning tends to focus attention on these objectives. By continually measuring decisions against this kind of standard and acting in a manner to attain it, the various managers in an enterprise become consciously alert to the objectives of the firm.

This focus is especially important in that most policies, procedures, and programs are interdepartmental in scope. Without central goals, there is a very real danger that departmental goals will be established that may or may not be consistent with the objectives of the entire enterprise. Well-considered planning tends to direct the stream of interdepartmental activities toward one objective and consequently restricts the area of freedom in the development of purely departmental plans. It also has the collateral advantage of bringing attention to the need for possible revisions and extensions of plans. Managers, being typically inclined to concern themselves with immediate problems, tend to overlook the future and its effect. But if those who plan are forced to keep the attainment of purpose clearly in mind, they are far more likely to see the need for revisions.

Again, as Goetz has stated the problem,[7] plans "focus action on purposes. They can forecast actions which tend toward the ultimate objective of economic efficiency, which tend away, which will likely offset one another, and which are merely irrelevant. Managerial planning attempts to achieve a consistent, coordinated structure of operations focused on desired ends. Without plans, action must become merely random activity, producing nothing but chaos."

Planning is economic. Because of the concentration on achieving the best way and because of the attempt to secure consistency, planning tends to minimize costs. It results in joint directed effort in the place of individual and piecemeal activity. It can replace uneven flow of work with even flow. It can result in studied decisiveness and designed action, as against recurring crises and snap judgments. In short, plans give rise to efficient and coordinated effort.

To guide subordinates requires careful planning at the top, as well as dissemination of adequate planning information to those who must exercise their authority to fill in the chinks of the major programs at the departmental level. It requires also an insistence that each manager recognize his duty to plan. Much of this endeavor can be accomplished through example, some through adequate clarity and information of top-management plans. Some can be effected through recognizing the ability to plan as a basic requirement for promotion or pay increases. And other results can be obtained by a thorough system of control to make sure that planning is done throughout the range of management.

Effective planning requires a careful understanding of plans and an agreement upon certain basic factors. If the production manager of a company is by nature a pessimist and figures that the company would not sell more than a certain volume of output, while the sales manager is an optimist and has hired salesmen to sell twice that volume, when, as a matter of fact, the market will most profitably absorb an intermediate amount, the loss in profits would be obvious. Individual managers are likely to differ in their outlook and appraisal of situations, and planning must be designed so as to channel their decision making toward a unified objective if profits are to be maximized.

The economy of planning is easily understood at the production level. No one who has watched the assembly of automobiles in one of the nation's large factories can fail to be impressed with the way that the parts and subassemblies come together. From one overhead conveyer system comes a yellow body, and from another the various appurtenances of the same color scheme. For another car, exactly the right engine or transmission or accessories fall into place at the exact appointed time. These events do not occur without extensive and detailed planning, and if such planning were not undertaken, the manufacture of automobiles would be chaotic and impossibly costly. While any manager sees the imperative necessity and economy of planning at the production level, it is surprising that other planning of equal and sometimes greater importance is occasionally left to chance and individual discretion.

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[7] Goetz, *op. cit.*, p. 63.

Even where uncertainty causes plans to go awry, there is better chance for bringing about economy of effort by planning than by not doing so. Random, inconsistent, and uncoordinated activity is sure to give rise to unnecessary and high costs. With planning, these costs are avoided, even though the business may fail because of unforeseen changes. But to the extent that the unforeseen can be anticipated or circumvented and plans be tolerably accurate, it is certain that the goals striven for will be attained at the least cost through adequate planning. Even a poor plan is better than no plan at all. As a successful business manager said to one of the authors, "To make poor decisions is understandable, but not to realize why a person made them or where he intended to go by making them is unforgivable."

Planning essential to control. The basic importance of planning for purposes of control has already been mentioned. A manager cannot determine whether his subordinates are accomplishing what he had hoped unless he has projected a future course of action. The navigator cannot check his route unless he has had a plan against which to measure it. As another top business executive told one of the authors, "After I leave my office at five o'clock this evening, I do not care what happened today, for I cannot do anything about it; I only care about what will happen tomorrow or the next day or next year, for they are the things I can do something about." Perhaps this is an extreme position, but it does serve to emphasize the point that the most effective control is one that looks to the future.

The Multiple Horizon of Planning

Shall plans be for a short period or a long one? How shall short-range plans be coordinated with long-range plans? These questions suggest that there exists a multiple horizon of planning, that, in some cases, planning a week in advance may be ample and that, in others, the desirable period may be that of years. Even within the same firm at the same time, various planning periods may exist for various matters.

The planning period. The National Industrial Conference Board, reporting on a survey of business planning in 1952,[8] disclosed, as might be expected, that businesses varied considerably in the period for which they planned. In some instances long-range plans were confined to two years in advance, while in others they were measured in terms of decades. But three to five years appeared to be the most common term for long-range planning, and few companies planned less than a year in advance. Moreover, the study disclosed a tendency toward lengthening the planning term, a tendency many companies attributed to tax policies and government actions.[9] On the other hand, certain business executives saw in the same factors influences limiting the length of their planning period.[10]

Observation of business planning leads to the belief that the long-run period tends to be picked on the basis of a period of years in which the management has some confidence that predictions bear a permissible degree of validity. The company that bases its long-run plans on a three- or five-year period may have picked this length arbitrarily or from the fact that other businesses do otherwise. But it is more likely that the period is selected because such a length of time is believed to be predictable.

Yet there must be some logic in selecting the right time-range for planning. In principle, this seems to lie in the nature of investment of resources of the enterprise. Capital is the lifeblood of enterprise. It is normally extremely limited in supply, relative to a firm's needs, and, when expended, there must be a reasonable possibility of recovering it through operations. When expended for various things, it represents a sunk cost that can only be recovered over time. For example, when Lever Brothers sank 25 million dollars into a new soap factory on the West Coast, they were, in effect, making the decision based upon the belief that the soap business would justify the recovery of this investment over a period of time. If this period were twenty years, then logically the plan should have been based upon a projection of business for such a time. Of course, the company might reduce the risk (as the company did) by spending extra funds to give the plant possible usefulness for other production than soap manufacture.

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[8] "Industry Plans for the Future," *Conference Board Business Record*, vol. 9, pp. 324–328 (August, 1952).

[9] As one company executive stated, "One reason why our long-range planning is getting to have a longer range is that, with taxes the way they are, we cannot afford to spend so much as we would like to in a year. Therefore, many things have to be held over." *Ibid.*, p. 325.

[10] For example, one manufacturer stated: "We are finding it more difficult to make long-range company plans because of the many uncertain factors which are ever-increasingly interrupting the normal thinking of today's businessman. I believe that every business should, as nearly as possible, be conducted on a long-range program, but find that it is necessary to inject so many 'ifs' into one's thinking that in the end what would normally be a long-range program has boiled down to six months or a year, on the average. We hope that before too long things will be established so that longer planning can be made a reality without too much interference from governmental activity." *Ibid.*

Investments other than for plant and equipment should likewise be based upon a planning period that will anticipate the recovery of investment. If a company, for example, embarks upon a project that requires unusual training or if it spends funds to improve the quality of its management, these costs are in the nature of sunk costs.[11] In some cases they can be recovered in a short time; in others the recovery may require a fairly long period.

In fact this recovery-of-cost principle as one determining the planning period may be applied to short-range as well as long-range planning. Such planning is ordinarily for periods ranging from three months to one year. It usually emphasizes that portion of planning which has to do with revenues and expenses and, as such, tends to reflect the cycle of raw materials, production, inventorying, sales, and collection. The company offering a product with little raw material, no need for much equipment or a long labor commitment, and immediate collection of accounts can operate on a short-range planning period. For example, the gardener who tends lawns and collects his pay from his customers weekly has little need to plan further in advance than recovery of investment in his limited tools. On the other hand, a company manufacturing airplanes, which may require from four to six years from inception to final collection of funds, may literally be required to regard the short range as a four- to six-year period.

Despite the principle underlying determination of the proper planning period, there is a tendency for companies arbitrarily to limit the short range to six months or one year and the long range to three to five years. These periods are often compromises. The short range is selected to conform to fiscal quarters or years, because of the practical needs for conforming plans to accounting periods. And the somewhat arbitrary limitation of the long range to three to five years is usually based, as has been indicated, on the prevailing belief that the degree of uncertainty over longer periods makes planning of questionable value.

In any case, even with the application of the recovery-of-cost principle, it is abundantly clear that various appropriate periods will exist for various portions of the planning program. The planning period for the acquisition of a multipurpose machine will be shorter, because of its ready liquidity, than that required for a special-purpose machine. The planning period for almost any piece of machinery will tend to be shorter than that for a large capital investment with special applications, such as a new refinery.

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[11] Even though these costs are expensed, they are nonetheless sunk in the enterprise at least to the extent that these are not tax offsets.

Coordination of short-range plans with long-range. Often short-range plans are made without reference to their relationship to long-range planning. This is plainly a serious error. The importance of attaining integration between the two can hardly be overemphasized, and no short-run plan should be made unless it contributes to the achievement of the relevant long-range plan. Many of the wastes of planning arise from decisions relating to immediate situations that fail to consider the effect of the action on more remote objectives.

The difficulty is that sometimes these short-run decisions not only fail to contribute to the long-range plan but may actually have effects which impede or require changes in the long-range plan. For example, if a small company accepts a large order for its goods without reckoning with the effect on productive capacity or cash position, it may so hamper its future ability to finance an orderly expansion as to require a complete reorientation of its long-range program. Or in another company, the urgency of obtaining needed small additions to plant may utilize vacant property so as to thwart its longer-range use as the site for a large new plant. In other instances the decision of a plant superintendent to discharge workers without adequate cause may interfere with the company's longer-range objective of developing a fair and effective personnel program. The short-range decision of Sewell Avery, chairman of Montgomery Ward, to curtail expansion of the business after World War II, because of his belief that a serious recession was at hand, has probably interfered with what must be his long-range program of enhancing the profitability of the company.

What is desired is that short-range planning contribute positively toward long-range plans or objectives. The company must, therefore, have long-range plans. Responsible managers, too, must understand them and provide continual scrutiny of the most immediate decisions to ascertain whether they contribute to the long-range programs. It is far easier to assure that short-range planning is consistent with long-range plans than it is to correct inconsistencies after they are made. Short-term commitments tend to set precedents for further commitments along the same line.

Economic Theory and Planning

It is in connection with the managerial function of planning that economic theory has much to offer. Holding that the profit motive is the mainspring of a capitalistic economy, economists have done much to develop principles applicable to decision making. With the tool of marginal analysis, many of the aspects of choosing between alternatives yield to solution. This tool is simply one of finding the results of incremental changes. Thus, marginal cost refers to the *additional* cost incurred by producing an additional unit, and marginal revenue is the additional increment of revenue received by the sale of an additional unit. These increments are spoken of as the margins of the subject matter under consideration, and an entrepreneur producing and selling a good is thought of as operating at the margin when his additional costs are just compensated by the additional revenue received. As can be shown by analysis, this point is the one of most profitable output, for it is the point beyond which any additional costs incurred would not be recovered through additional revenues and below which the spread between marginal costs and marginal revenues would decrease profits.[12]

Planning and the static theory of the firm. The static theory of the firm is postulated on the assumption that a kind of snapshot is taken of the firm at a given instant of time in order to rule out variations caused by uncertainty due to time. Under this kind of condition, that of "everything else being equal," planning becomes a matter of selecting from available alternatives based upon known market factors and input-output relationships. These variables are "timeless," and planning becomes a problem of finding the optimum plan, that which will maximize net receipts of the firm.[13]

In marginal terms, the optimum plan will be the one in which additional inputs (or costs) will just equal (but not exceed) *additional* receipts (revenues). Obviously, in a complex business plan, such as the location and construction of a new refinery, the number of factors bearing on costs and revenues are innumerable, and the determination of margins very complex. But the marginal analysis is a useful tool for the planner, for it high-lights the importance of determining profit maximums by considering incremental costs and revenues.

Thus, a firm may already have a certain-sized plant and an overhead (service and supervisory) organization to operate it. If capacity for more production is available, the desirability of accepting a new contract should logically be decided upon the basis of the additional costs to be incurred and the additional revenue to be obtained. This kind of analysis implies that the customary system of using average costs, with a prorate of all burden and overhead costs, may not always lead to the most profitable course of action, for it may lead the manager to turn down a contract that would more than pay for additional costs.

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[12] A pioneer work in the application of economic theory to business planning is that published by Albert G. Hart in 1940. See his *Anticipations, Uncertainty, and Dynamic Planning* (New York: Augustus M. Kelley, Inc., 1951). This work, as well as that of other economists, is drawn upon here.

[13] *Ibid.*, p. 14. Hart refers to this as the maximization of "present discounted value of scheduled net receipts," in order to take into account the fact that future returns must be corrected for interest on a discounted basis. While this is indubitably an adjustment for the sake of strict accuracy, it is an adjustment that is seldom made in practice because of the margins of error unavoidably existing in planning. It is, in a sense, refining the unrefinable, and, in any case, the businessman enters interest as an offset against the revenues to be expected from a plan of action.

The marginal analysis also emphasizes the importance of fixed costs, whether these are in the nature of sunk capital investment or of an established minimum of service and supervisory personnel. Depending upon the range of output considered (obviously, if an increase in output would require a larger plant or a larger overhead organization, these new fixed costs become marginal to the problem under consideration), costs that are fixed in nature do not enter the planning problem, except in the sense of getting increased utilization of these facilities and personnel.

The fact that marginal analysis does not normally reflect all costs, but only additional ones, also serves to show the importance of flexibility in business planning. Flexibility is the quality of operations (facilities or personnel) that permits changes in kind and volume of output without undue costs. If machines or people can be utilized for different products or different volumes of production, without loss in investment already incurred, the firm may be regarded as having perfect flexibility, so far as production is concerned. But it may have other inflexibilities. If, for example, it could not obtain additional working capital for expansion of operations, the flexibility of production machinery and personnel would allow changes in output only at a level permitted by the working capital.

Problems of flexibility in business planning arise generally under conditions of dynamic planning, primarily because of the factor of uncertainty. However, even under static conditions, some question of flexibility exists. Where it is known that varying quantities of varying products will be produced, the manager plans for the flexibility needed for these changes, but he does so with complete certainty.

Planning under dynamic conditions. The analysis of economic forces under static conditions is useful only to isolate the effects of uncertainty [14] and thereby develop tools for analysis. Static conditions do not exist in practice, and business planning is, therefore, undertaken under conditions of change and uncertainty. It is this dynamic character of the business environment that makes planning difficult and the utilization of many economic principles of questionable value.

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[14] *Ibid.*, pp. 25, 27. Hart adds capital-market imperfections and other market discontinuities to uncertainty as major factors that distinguish the dynamic from the static. These are important factors, since the firm cannot practically add or subtract extremely small quantities of capital and since orders are often for minimum quantities. It is a fact that in most real business situations the schedule of supply of capital or the schedule of demand for a product do not represent smooth connected lines. While these discontinuities have a significant bearing on planning and while other frictions exist (such as the desire of an owner of a small business not to use outside capital because of danger of loss of control), in this discussion simplification of the issues is obtained by dealing with the primary cause of dynamic conditions—uncertainty.

The central problem under dynamic conditions is the accuracy of a planner's estimate of the future. Obviously, the future is uncertain, although the degree of uncertainty may vary widely as between products, markets, geographical and political areas, and times. If a business manager makes an estimate of a future situation, he necessarily makes certain assumptions as to what will happen. As he weights his contingencies in one way or another, he obtains different results. Suppose, for example, that a manager were planning a new plant for the manufacture of a product and felt that he needed a ten-year span to be sure of recovering his costs. He might estimate the future with respect to markets, prices, labor costs, material costs, utilization of plant, labor efficiency, taxes, and other factors. Suppose further that he estimated six possible situations that he regarded as being most likely to occur, created out of different sets of assumptions as to what the future would bring. These might bring completely separate estimates of net profits to be obtained from the operation and could be charted, as follows:

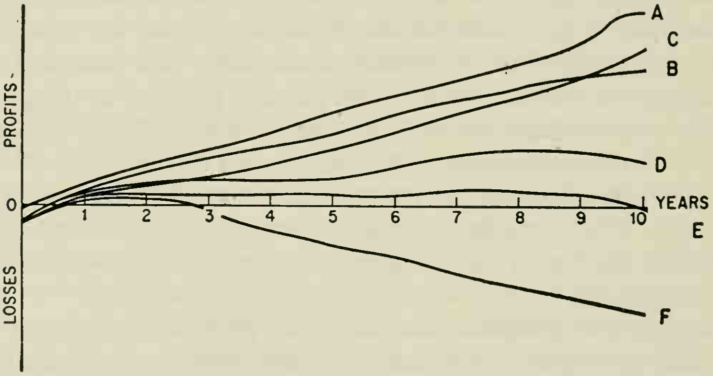

Fig. 19. Accumulated profits from new plant on basis of six estimates of future.

As might be expected, all estimates for the first year or two are fairly close together, since the manager may feel more certain of near-term than of long-term results. But as the planning period is extended, the fact that this or that contingency may occur tends to make the estimate of accumulated profits vary from one of high profits as in forecast A, to one of bare break-even (E), to one of projected loss (F).

Several observations may be made concerning this simplified model of planning under conditions of change and uncertainty. In the first place, the tools of marginal analysis are still useful in arriving at these various estimates of the expected situations. In each set of contingencies assumed, the planner would attempt to maximize profits by assuring himself that additional costs are compensated by additional revenues and that, within the limits of divisibility of units of production, no opportunity exists for maximizing profits by increasing or reducing costs or revenues.

In the second place, this example may be utilized to emphasize the fact that the uncertainties over time, plus the alternatives available to accomplish results under each set of uncertainties, give alternative possibilities astronomical in number. While only six possible forecasts are included here, the actual number may be infinite. In order for a manager to plan, therefore, especially where the subject is complex and the time period long, he must have some means of limiting his analysis to the most probable. In most cases, this is done by judgment and test. An experienced business analyst tends to have a feeling for problems, which grows out of his familiarity with the underlying factors. If he can consider the basic estimates from which his profit calculation is made and decide which are most likely to occur, he can soon limit the alternative projections to a few most probable ones. At this point, the adoption of a plan is likely to be based upon a weighing of the risks and benefits expected from these few probabilities in the light of the character of underlying uncertainties, the resources of the firm, and the ability and willingness to assume the risks involved.

As can be seen, the difficult problem in planning is the determination of underlying factors, such as future markets, prices, and costs. This is a matter of the forecasting and the calculation of probabilities. For those companies that can afford the work of specialists in this field, with their utilization of mathematical, statistical, and market-research techniques, a fairly high degree of accuracy in forecasting can be attained. A forecaster may not be able to anticipate with any degree of accuracy such things as war, revolutionary invention, or cataclysmic economic changes, but within the framework of an assumption that one or the other major happenings will occur, forecasting can be undertaken with a workable degree of accuracy for periods of at least five years in advance.[15]

Steps Involved in Planning

The nature and techniques of planning may be clarified by outlining the steps involved in major planning. Although they are presented here as dealing with a major program, such as the acquisition of a new plant or a new fleet of airplanes or the development of a new product, they are still steps that in their essential nature must be followed in any kind of thorough and logical planning. Minor plans may not be as complex, and certain of the steps may be more easily accomplished, but these differences should not obscure the fact that the planning process has a logical and practical set of techniques and principles of general application.

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[15] In 1945 forecasters of three major airlines estimated that 1951 domestic airline traffic would reach approximately 10.5 billion passenger-miles. The actual figure for 1951 was 10.2 billion for the trunk lines and 10.5 billion for the combined trunk and feeder lines.

Establishment of objectives. The first step in the planning process is the establishment of planning objectives. This must be first at the level of the entire enterprise, but the necessity for having an objective or objectives for each derivative or subordinate plan likewise becomes evident. Planning must be for or toward some goal to be meaningful, because the objective gives the key as to what basically to do, where to place the primary emphasis, and what to accomplish by the network of policies, procedures, budgets, and programs.

Regardless of the nature of objectives, they must be understood if plans of any meaning are to be pursued in the enterprise. Thus, the objective of the entire enterprise should control the direction of major plans affecting the enterprise as a whole. These plans, then, in their reflection of this objective, define the objectives of the major departments. Major department objectives and plans give a key to the objectives of the derivative departments, and so down the line through the organization structure. Moreover, the lesser subdivisions will do their planning more effectively if they understand the over-all objectives of the enterprise.

But even this may not be enough. A group of research engineers in a military laboratory once remarked that, while they understood the objective of the Defense Department and those of the military service for which they worked and while the detailed project plans of the laboratory were well understood, they did not always understand the objective of the project on which they worked. Their feeling was that, if they knew for what purpose their project was to be utilized, they might better be able to formulate plans for accomplishing more efficiently the principal objective. It is, therefore, of great importance that the entire hierarchy of objectives applicable to a department's planning be understood.

Establishment of planning premises. A second logical step in the planning process is the establishment of, agreement upon, and dissemination of, planning premises. These are forecast data of a factual nature and basic policies expected to be applicable for the future. Premises, then, are planning assumptions. They are the future setting against which all planning takes place.

The establishment of planning premises necessarily involves forecasts of the future. What kind of markets will there be? What quantity of sales? What prices? What products? What costs? What wage rates? What tax rates and policies? What new plants? What policies with respect to dividends? How will expansion be financed? It is important to realize that planning premises include far more than basic forecasts of population, prices, costs, production, markets, and similar matters.

Some premises are forecast policies that have not yet been made. If, for example, a company does not have a pension plan and if no policy with respect to having one has been made, those who would develop planning premises must forecast whether such a policy decision will be made and what it will contain. Other premises naturally grow out of policy decisions or plans already made. If, for example, a company has a policy of paying out 5 per cent of its profits before taxes for contributions and if there is no reason to believe that this policy will be changed, this policy becomes a planning premise for the future. Or, if a company has made large investments in special-purpose fixed plant and machinery, the very fact that this has been done becomes a planning premise of some importance for the future.

As one moves down the organizational hierarchy into divisional, departmental, branch, or section plans, the composition of planning premises tends to change somewhat. The basic outlook will be the same, but the existence of major plans and the development of new major plans will materially affect the future picture against which the managers of these lesser organizational units must plan. Plans affecting a manager's area of authority become premises for *his* planning.

Planning premises may be divided into three groups. There are those planning premises that are noncontrollable, in the sense that the individual firm doing the planning cannot do anything about them. These include such premises as population growth, future price levels, political environment, tax rates and policies, and business cycles. Then there are those planning premises that may be regarded as semicontrollable, in the sense that the individual firm cannot control them but can influence their happening to a greater or lesser degree. In this category may be assumptions as to the share of the market, the character of labor turnover, labor efficiency, company price policy, and even industry legislative policy. And finally, a group of typical planning premises may be characterized as controllable by the firm. Among these are those policy matters and programs that the company management can decide largely for itself. They may include such policies as expansion into new markets, the adoption of an aggressive development or research program, or the selection of a site for headquarters offices.

One of the difficulties with establishing a complete set of planning premises and keeping them up to date is the fact that every major plan, and many minor ones, tend to become planning premises for the future. The decision to establish a major factory in Kansas City, for example, will become an important premise for making other plans where this plant location will be important. Or a railroad, for instance, would find little sense in premising its future plans on reaching markets in Florida if its line were in the Pacific Northwest, and there could be no reasonable expectation of expanding to the Southeast. And when an airline equips its long-haul routes with one type of aircraft and builds maintenance and overhaul facilities for this purpose, this very act tends to become a premise for other plans.

It would be a matter of some surprise if all members of a company's management at all levels would agree independently as to the kind of future a company faces. One manager might expect world peace to last for ten years; another, world war for the same period. One manager might expect prices to go up 10 per cent in five years; another, 50 per cent; and another expect that prices would drop.

The lack of planning coordination through use by managers of different sets of premises can be extremely costly to a company. Planning premises should, therefore, be agreed upon. A single standard for the future is a necessary step in good planning, even though this standard includes several sets of premises, with the instruction that different sets of plans be developed on each. In many companies, for example, it is customary to develop plans in prospects of both peace and war, so that, regardless of what occurs, the company will be ready. Obviously, however, a course of action taken for any future period can follow only one set of premises for that period.

Since agreement upon planning premises is important to coordinated planning, it becomes a major responsibility of managers, starting with those at the top of the company, to make sure that their subordinates understand the premises upon which they are expected to plan. In well-managed companies the top managers obtain unanimity with respect to premises for planning purposes, even if the chief executive must force a selection of the future outlook upon subordinates with differing views. In most cases, these major premises are the subject of careful study, including often extensive economic and other research, and of considered deliberation, so that the best thinking available in the company can be brought to bear upon them. It is not unusual for chief executives to force the top managers to come to some conclusion on the future that the company faces and, through group deliberation, arrive at a set of major premises that all can accept. But whether they are accepted by all or not, no chief executive can afford to chance a situation where his lieutenants are planning their portions of the company's future on substantially different sets of premises.

Established and accepted planning premises are only useful to those managers who are aware of them. As in other phases of the managerial job, it is important that planning premises be appropriately disseminated throughout the organization. This does not necessarily mean that all planning premises be communicated to all managers, but it does imply that all managers will have knowledge of those premises necessary for him to do an intelligent and coordinated job of planning.

Search and examination of alternative courses of action. A third step in the planning process is to search for and examine alternative courses of action. There is seldom a business plan for which reasonable alternatives do not exist. Moreover, before weighing alternatives and reaching a decision, one is wise to search for alternatives that may not be immediately apparent. Quite often an alternative not immediately seen proves to be the most profitable way of undertaking a plan.

Having searched for the alternative courses of action and having reduced the available alternatives to those few that seem to offer the best possibilities for fruitful action, the planner must next examine these alternatives. In the case of a major plan, this examination may be very complicated, leading to the preparation of detailed forecasts of costs and revenues, effects on cash position, and other considerations of a tangible nature, as well as to the consideration of many intangible factors. In deciding to build a new aluminum plant in 1950, the American Aluminum Company not only made a careful study of the costs of electricity at various locations in the country, the availability of suitable sites, the costs of transportation of raw and finished materials, costs of transmission of power, and other items that could be reduced to figures but also made a careful analysis of such intangible factors as the effect of the plant on local opinion and the question of taking the capital risk of building its own power-generating facilities.

Evaluation of alternative courses of action. Having sought out the available alternatives and having made an examination of their strong and weak points, the planner must evaluate the alternatives. This evaluation involves the weighing of the various factors involved. One alternative may appear to be the most profitable course of action but may require a large outlay of cash and a slow payback. Another course may be less profitable but involve less risk. Still another course of action may better suit the company's long-range objectives.

If objectives were simply to maximize profits immediately, if the future were not fraught with uncertainty, if a company did not have to worry about cash position and capital availability, and if there were not so many factors that could not be reduced to definite data, this evaluation would be easy. But the typical planning problem is so replete with uncertainties, problems of capital shortages, and intangible factors that the evaluation is usually very difficult. Even with relatively simple problems, the evaluation may not be easy. A company may wish to enter a new product line primarily for purposes of prestige. The forecast of expected results may show a clear loss. But the question is still open as to whether the loss, which is believed to be forecast within a narrow margin of error, is worth the gain in prestige.

Selection of a course or courses of action. The fifth planning step is that of selecting the course or courses of action to be undertaken. This is the point at which the plan is adopted. Often an analysis and evaluation of available alternatives will disclose that two or more courses are advisable and the manager concerned may decide to do several things rather than the one best thing.

Formulation of necessary derivative plans. But the planning process is not complete. Once a plan is adopted, there are almost invariably necessary derivative plans to be constructed to give effect to and support the basic plan. A derivative program may be necessary, as was the case mentioned above where the airline decided to acquire a new fleet of airplanes and, in turn, required plans for the hiring and training of ground and flying personnel, the acquisition and placing of spare parts, and other programs. In addition, it may be necessary to develop new policies and procedures for effecting the plan. And in most instances these plans will be accompanied by various cash, capital expenditure, and expense and revenue budgets to make sure that individual managers, in exercising their authority, will be contained within the framework of the plan contemplated.

In other words, plans do not accomplish themselves. They require a breakdown into further plans, with each segment of the company and each manager concerned executing the subsidiary plans necessary for making a basic plan a reality.

Planning within the Organization Structure

The type of planning in which a manager engages depends upon his position in the organization structure. Top-management planning has to do with broad over-all programs and policies important to the company as a whole. Planning within each department will, of course, be related to the departmental function and to the scope of authority delegation of the manager. In production or factory planning, for example, the programs devised and undertaken will be primarily concerned with scheduling machines, with utilization of manpower, and with procurement and use of materials.

The essential point is that the planning process is basically the same, wherever planning is undertaken. It may vary in complexity and breadth as the problem area and the kind of authority differ. As a matter of fact, planning at the lower levels of the organization structure, particularly in the production department, tends to be better and more thorough than that at upper levels. Among the more important reasons for this is that at the lower levels planning tends to be less a problem of dealing with the uncertainties of human reactions and more a problem of dealing with the definiteness of materials and machines. In addition, the emphasis on production management during more than four decades of scientific management development following the work of Frederick Taylor has resulted in more attention to planning at this level than on any other. Another factor is that at this level mistakes in planning show up more quickly because the results of poor planning are soon disclosed by missed production schedules, confused operations, and high costs. While the quality of planning at top levels of an enterprise is of the greatest importance to management, sometimes the results of poor planning are not apparent until a company has lost an important market, has declined in financial strength or competitive position, or has become grossly inefficient.

What is often forgotten is that participation in planning is important at all levels in organization. It is even wise to have participation in *major* planning by all the managers in an enterprise. Every manager should be currently informed of all major plans affecting his area of authority. The informed manager is better able to develop suitable plans for his own department and to understand the part he is required to play. Furthermore, it is desirable for managers to be encouraged to contribute suggestions to top managers. Not only may these be of value to those making plans, but loyalty toward major plans can be nurtured from a feeling of participation. A third important element of participation is the desirability of managers' being consulted in advance as to those plans they are expected to execute within their own department. Clearly, also, each manager must be required to make those plans necessary if his department is to carry out the objectives, policies, procedures, and programs of the enterprise, and he must be held responsible for checking continually upon the effectiveness with which his subordinates carry out the plans.

Participation in all planning affecting a manager's area of authority, through his being informed, contributing suggestions, and being consulted, contributes to good planning, loyalty, and managerial effectiveness. Yet one may ask how in a large plant the hundreds of foremen and superintendents, sales managers, and other managers *can* be consulted. One cannot imagine the top managerial team of the Ford Motor

Company, for instance, consulting with their thousands of subordinate managers on the plans for a new line of cars.

Unfortunately, in large companies it is frequently not possible for this kind of planning communication to take place. Even so, there are devices available to management that can lead to wider participation of subordinate managers in the making of programs affecting their areas of operations. One is the use of a planning staff, which can spend time with key subordinate managers in developing plans and which will encourage these managers to discuss such matters with their subordinates. In some companies, this practice has produced valuable suggestions and greater understanding of what the top managers were trying to do.

Another valuable device is the establishment of suitable planning committees. While committees have limited administrative use, one of their most important values is improvement in communication. If appropriate committees are established at various levels and points of the organization structure, they can be effective in transmitting planning information, in eliciting suggestions, and in serving as a consultative device. They must be skillfully handled to avoid the expenditure of too much time, but, if properly used, they can pay handsome dividends in terms of helpful advice, understanding of objectives and programs, and in loyalty.

Still another helpful means employed successfully in some companies is the management club. This is an organization of all members of management, from the president to the foreman, and in a large company may be broken up into a number of divisional or territorial clubs. At a specified number of meetings during the year the president of the company or a team of top managers should conduct a meeting at which the planning and thinking of this top echelon are candidly reported to the management group and questions on these matters answered. The authors have noted that in several companies where this device has been tried the lower-management group has responded avidly and gained a strong feeling of unity of objective with the top management of the company. Even the dullest financial matters thus become vital, and the most complicated plan interesting. What many managers overlook is the simple fact that the rank and file of managers have a strong interest in these matters because, after their church and family, there is no more significant force in their lives than the enterprise for which they work.

But no device of encouraging participation in planning and the development of effective planning throughout an organization will replace managerial deficiencies in other directions. The strength of top leadership and the example given to lower managers, clear delegations of authority and careful descriptions of job duties, the development of managerial skills through proper training, and effective techniques of direction and control are among the priceless ingredients of good management that no system of communication and participation can replace.

Selected References

Alchian, A., "Uncertainty, Evolution and Economic Theory," *Journal of Political Economy*, vol. 58, pp. 211–221 (1950).

Davis, R. C., *The Fundamentals of Top Management*, Chaps. 3–4. New York: Harper & Brothers, 1951.

Doob, L. W., *The Plans of Men*. New Haven, Conn.: Yale University Press, 1940.

Drucker, P. F., "The Function of Profits," *Fortune Magazine*, vol. 39, pp. 110–120 (March, 1949).

Fayol, H., *General and Industrial Management*, pp. 43–53, 97–110. New York: Pitman Publishing Corporation, 1949.

Goetz, B. E., *Management Planning and Control*, Chaps. 1–4. New York: McGraw-Hill Book Company, Inc., 1949.

Hart, A. G., *Anticipations, Uncertainty and Dynamic Planning*. New York: Augustus M. Kelley, Inc., 1951.

Hempel, E. H., *Top-management Planning*, Chaps. 1–3. New York: Harper & Brothers, 1945.

"Industry Plans for the Future," *Conference Board Business Record*, vol. 9, pp. 324–328 (August, 1952).

Newman, W. H., *Administrative Action*, Chap. 2. New York: Prentice-Hall, Inc., 1951.

Stryker, P., "P. & C. for Profit," *Fortune Magazine*, vol. 45 (April, 1952).

Terry, G. R., *Principles of Management*, Chaps. 4–5. Homewood, Ill.: Richard D. Irwin, Inc., 1953.

Urwick, L., *The Elements of Administration*, Chaps. 1–3. New York: Harper & Brothers, 1944.

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PLANNING PREMISES

One of the fundamental principles of planning is that the development of enterprise plans must be undertaken against an established and accepted background of estimated future facts and policy. While there may be different sets of planning premises for different times and alternative sets of premises for alternative programs of action, the development and operation of any given set of plans must be one that has been uniformly accepted by those who participate in making the plans.

Planning premises are essentially forecasts, since they represent the setting down of events expected in the future. At the same time, a distinction should be drawn between forecasts that are planning premises and forecasts that translate into future expectancies, usually in financial terms, the actual plans developed. In other words, an enterprise must forecast to determine future business conditions, sales volume, or political environment, and such forecasts furnish premises against which plans are developed. However, if a company forecasts the costs or revenues to be expected from a new capital investment, it is translating a planning program into certain future expectable events. In the first case, the forecast is a prerequisite of planning; in the second, the forecast is a result of planning.

At the same time, it must be recognized that plans themselves and the forecasts made to reflect their future effects often become premises for other plans. The decision by an electric utility to construct a steam-generating plant, for example, creates conditions that give rise to premises for transmission-line plans, power-sales promotion programs, and other plans necessarily dependent upon the fact that the generating plant is built.

Selecting Planning Premises

It is obvious that the business firm can hardly forecast in such detail as to fill in every aspect of the future background against which it intends to operate. Often, as a matter of fact, a future picture is skimpy, being limited to forecasts of general business conditions, price-level behavior, and political climate. In other cases, the picture is drawn in considerable detail. In some instances, planning premises may include only those that have to do with an individual company's operations, and external factors are ignored. But in most cases, the minimum necessary premises for planning include factors both internal and external to the enterprise.

Selecting the strategic elements. Throughout the field of scientific analysis, it is economical of time and effort to deal only with strategic factors. These are, in essence, the significant elements in a problem, the dealing with which makes the most difference in solution of the problem. As in any field of analysis where problems have many facets, planning premises must be selected with a view to emphasizing strategic elements.

This practice is necessary for three reasons. First, there are so many aspects of a business's future that it is impracticable to forecast them all. Secondly, it is good economy to devote one's attention to those factors that influence most the decision to be made. A third reason is that it causes to be eliminated from consideration important elements of the future which are well known, definite, and generally understood and which, not being strategic, will not be decisive. In the latter category, are such considerations as the competitive service market of a telephone company with a monopoly franchise in an area. The fact of exclusive franchise is an important planning premise but may not be strategic for immediate problems, since it is not subject to change for the foreseeable future.

In selecting strategically important planning premises, an enterprise must relate its basic program to those things that bear materially on it. In most businesses, the movement of the business cycle is a strategic factor, although there may be some businesses, such as a water company in a small New England town, for which even this pervasive factor is unimportant. It is difficult to see how expected price-level movements can fail to be of strategic importance to almost all businesses. And most businesses will be concerned with population growth and location.

The universality of certain kinds of planning premises—empirical evidence of their strategic nature—can be obtained from the kind of economic research done by companies. A study made in 1950 of 38 companies of varying sizes and types discloses that 27 of the companies made forecasts of general business conditions, 23 of industry economic outlook, 20 of raw-material prices, 17 of finished-goods prices, 36 of company sales, and 30 of long-term capital expenditures.[1]

On the other hand, there are many premises of strategic importance to one given industry and not to another. In the airline industry, for example, the availability of a limited number of types of airplanes becomes an important planning premise, since, unlike many other industries, an individual airline cannot easily develop a special type of machinery or plant for its own peculiar operations. The passenger load factor (ratio of seat-miles sold to seat-miles operated) also has strategic importance to the airline industry because, unlike the typical manufacturing industry, an airline's output, the seat-mile, if unsold, cannot be stored for future use. Likewise, in a closely regulated industry, the policies and practices of the government have much more importance for planning purposes than in a relatively unregulated business. Thus, the Civil Aeronautics Board's policies on new routes or rates are strategically consequential matters to an airline, but the toothpaste manufacturer has no such limitation on his market.

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[1] *Business Forecasting: A Survey of Business Practices and Methods* (New York: Controllership Foundation, Inc., 1950), p. 13.

It is the selection of strategic planning premises that lies at the base of good planning. Unless premises are selected with this need in view, wastes will be suffered, or the key factors in the future picture overlooked.

External and internal premises. Some of the premises for planning lie outside the firm, and others arise from the planning environment within the firm. Those premises external to the firm may be classified in three groups: the general business environment, which includes various political, economic, social, and technological features of the world in which the firm operates; the product market, which encompasses those items influencing demand for the firm's product; and the factor market, which has to do with land, location, labor, materials and parts, and capital.

Premises internal to the firm include the sales forecast, capital investment in plant and equipment, policies, and the many other conditions that influence or dictate the type of planning to be done. Not the least important among these internal planning premises is the nature, beliefs, behavior, strong points, and weaknesses of the top leaders or owners of the business and often of key executives and employees.

It might be assumed that controllability of premises varies with the extent to which they are internal or external to the firm, and, in general, this is true. However, there are many premises external to the firm that can be controlled to a marked degree by managerial action. Among these is the ability of the firm, by its own action, to influence the size and character of demand for its products and to influence the political environment. Furthermore, there are certain internal premises that tend to be uncontrollable. The effect of sunk investment and the tendency for workers and managers to resist change are among the various factors largely internal in nature and often practically beyond the control of its management, at least in the short run.

Tangible and intangible premises. Occasionally, business managers forget that planning premises may be intangible, as well as tangible. Premises are referred to as tangible when they can be quantified, whether in dollars and cents, labor-hours, units of production, or machine units.

Of equal importance in planning are the many intangible factors normally encountered. These cannot be expressed in figures, but they are significant background elements in the planning scene. For example, it may be calculated that to produce and sell a new product would cost *x* dollars per unit and that it would sell at *y* dollars, leaving an attractive profit of *z* dollars. But the product may not fit the over-all strategy of the firm. If the firm's reputation has been built on high-quality luxury items and if the product does not fit this category, the management may feel that the loss in prestige may offset the profits to be made on the new product. It may be objected that the loss in prestige is really a tangible factor, for the management is really taking the position that the net profits of the firm as a whole will be enhanced by not producing the product in question. If a way could be found to estimate quantitatively the loss in profits on other items, the factor referred to as intangible would become tangible in nature.

Unforseeable events. One of the difficulties in selecting and formulating planning premises is the occurrence of events that, despite the thoroughness and expertness of forecasting, cannot be foreseen. A strike in a supplier's plant or even in the management's own plant may come without warning and upset an otherwise well-premised program. Unexpected legislation, wars, or other political events may upset an otherwise competent forecast. Likewise, new discoveries, sudden changes in styles, and market and technological changes may come with little warning. Moreover, floods, droughts, earthquakes, or other "acts of God" are usually impossible to foretell.

These incidents, sometimes referred to as "economic accidents," [2] naturally have an important bearing on the actual execution of plans. In the shorter term, managers may be able to forecast the occurrence of some, but for the longer term it may be impossible to premise them with any degree of exactness. It is for this reason, as well as the margin of error inherent in any forecasting, that managers must provide for planning flexibility, have available for use alternate plans based on alternate sets of premises, and allow for contingencies in the preparation of estimates. In some cases, the element of luck plays a considerable part in the success of plans. The authors have heard cynics say that business profits are 80 per cent luck and 20 per cent skill. Even if good or bad fortune played so large a part in business success, and experience indicates that it is much smaller, the remaining percentage ascribable to skill is still significant in the dynamic competitive world in which business operates.

FORECASTING

If the future could be forecast with accuracy, or, to put it in another way, if the businessman were operating under static conditions, business planning would be relatively simple. The manager would need only take into account his human and material resources, compute the optimum method of reaching his objective, and proceed with a high degree of certainty toward it.

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[2] Wilson Wright, *Forecasting for Profit* (New York: John Wiley & Sons, Inc., 1947), p. 20.

Fayol speaks of *prévoyance* as the essence of management.[3] This looking ahead, according to Fayol, includes both assessing the future and making provision for it.

As a matter of fact, Fayol refers to plans as syntheses of various forecasts, whether short or long term, special, or otherwise.[4] It is interesting in this connection that Fayol recommends yearly forecasts and ten-yearly forecasts, the latter being revised at least each five years and oftener if proved necessary by the yearly ones. Furthermore, each forecast was to include a wide variety of subsidiary or elemental forecasts, comprised of such data as capital, output, production costs, sales, selling price, and other factors.

In practice, forecasts vary considerably in length, breadth of coverage, and quality. They may vary from little more than a manager's hunch to a detailed analysis of the future made by a competent staff. As has already been indicated, some businesses need expert forecasts for long periods in the future, and others may be able to operate effectively with very short forecasts that reflect the predilections of their managers. Furthermore, some businesses may *need* expert forecasts but be unable to afford more than the information that grows out of a manager's reading of economic predictions in numerous journals and papers plus the manager's own judgment of the situation.

The need for forecasting. The need for adequate forecasting is apparent from the key role it must play in management planning. But forecasting has values aside from its strict use in developing plans. In the first place, the making of forecasts and their review by managers compel thinking ahead, looking to the future, and providing for it. Also, the very act of forecasting may disclose areas where control is lacking and where adequate control is necessary for the efficient and effective operation of the enterprise. For example, in a report submitting the results of a forecast to his key executives, one president of a large company said: "The declining profit in this forecast is disappointing, but it is my impression that every forecast extending beyond a year has shown profits less than we have been able to procure as the result of determined efforts by all members of our management team. This picture should not dishearten us but should stimulate our efforts to improve it."

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[3] Henri Fayol, *General and Industrial Management* (New York: Pitman Publishing Corporation, 1949), p. 43. In this translation, the term is translated as "foreseeing."

[4] Fayol emphasized this usage in an interview published in the *Chronique Social de France* in January, 1925. Quoted in Urwick's foreword to *General and Industrial Management,* p. xi.

Forecasting, especially where widely considered or participated in throughout the organization, may help to bring unity and coordination in plans. Forecasting focuses attention on the future and, by so doing, assists in bringing a singleness of purpose to planning that cannot easily exist otherwise.

Even though much emphasis is placed on forecasting, it must be recognized that all forecasts are subject to a degree of error, since the best analyses or judgments cannot result in true clairvoyance. Guesswork can never be omitted from forecasts, although guessing can often be reduced to a minimum. Sometimes the margin of error in forecasts is considerable, although in most cases this margin can be brought within tolerable limits. One of the difficulties is that business managers often expect too much from forecasts and fail to recognize the unavoidable margin of error which must exist in any prophecy. Business managers also occasionally neglect to examine the underlying assumptions of a forecast to determine whether they are supported by facts, reasonable estimates, or accurate reflection of policies and plans.

One cannot overlook the importance of informed and intelligent estimates made by experienced business executives and technicians. These "guestimates" are often extraordinarily prophetic. One of the authors, who has participated in much planning and many forecasts, has found that the intelligent guess of a well-qualified executive furnished an excellent check on the accuracy of forecasts made by a competent staff. Sometimes the specialist overlooks major policy and other matters which have a strong bearing on a forecast but whose influence may not be immediately apparent. While a clairvoyant quality is a rare gift, many experienced managers have developed it through the study of countless problems and a constant habit of looking ahead. Where this kind of ability exists, it is an excellent supplement to the work of the forecaster.

Essential elements in the forecasting procedure. From his experience as a management consultant, James W. Redfield has summarized the essential elements in the forecast process as follows: [5]

1. *Developing the groundwork*—that is, carrying out an orderly investigation of products, company, and industry, in order to determine generally how each one of these has progressed in the past, separately and in relation to each other. In short, the aim is to build a structure on which future estimates can be based.

2. *Estimating future business*—that is, following a clearcut plan for working out future expectancies in the form of a *mutual* undertaking with key

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[5] J. W. Redfield, "Elements of Forecasting," *Harvard Business Review*, vol. 29, no. 6, p. 82 (November, 1951).

executives and, after future business has been estimated in accordance with the predetermined step-by-step procedure, issuing an official statement of the resultant forecast. The key executives, by mutually developing the forecast, automatically assume co-responsibility and individual accountability for such later deviations of actual from estimated results as may occur.

3. *Comparing actual with estimated results*—that is, checking the attained with the anticipated status of the business periodically, tracking down reasons for any major differences. The forecast provides benchmarks for measuring unanticipated gains or losses. Once measured, the reasons for important variations can be investigated on the spot.

4. *Refining the forecast process*—that is, once familiarity with estimating the future of the business is gained through practice, sharpening the approach and refining the procedure. One must be reasonably tolerant with early forecasts, recognizing that proficiency with a new tool is not acquired overnight, and at the same time insist on constant improvement as experience with the process is gained.

Premises External to the Firm: The General Business Environment

In the present section, certain of the main features of the general business environment will be outlined. Many of these premises will apply to nonbusiness enterprises, although some aspects of environment not discussed here will be important if the enterprise is a church, a university, a charitable undertaking, or political agency.

Political stability. The political environment in which a business operates is an area of premising of the utmost importance. Government, whether at the international, Federal, state, or local level, is responsible for a number of elements in the environment of business over which the firm has little or no control. Moreover, the question of political stability is perhaps more important than the extent to which government controls a business.

In other words, if the political situation is stable, a business manager has a known condition to consider in making his plans. But, as has been the case for more than two decades in the field of international politics, where an extraordinary degree of instability exists, business managers find it difficult to forecast the future. The questions of war, cold war, armed truce, or peace are usually uppermost in a planner's mind because of their permeating effect upon other factors of the business environment.

The area of political stability is important in domestic affairs also. In many of the countries of Europe, the instability of the internal political situation, plus the instability of the world situation, has made business planning extremely difficult. Even in the United States, the character of the national, state, or local administration and the definiteness of policy of the various legislative assemblies affect business policy. When these are unstable, business planning is greatly handicapped.

Government controls and enterprise freedom. Clearly, also, a business must develop reasonable planning premises as to the nature and extent of government controls and the freedom or limitation of individual enterprise. Modern states are characterized by the extent to which private enterprises are prohibited, regulated, or subsidized. Moreover, these controls continually change, largely in the direction of expansion, since government control has an inherent tendency toward the generation of more controls in order to patch gaps, bring equality of regulation or subsidy, and strengthen original control objectives.

Despite the self-generative tendency of controls to expand and of all businesses to be subject to controls once reserved for transportation companies and public utilities, the degree of control over individual businesses varies considerably. A railroad, for example, has little freedom to change prices, enter or abandon service, choose its financing policies, or keep accounts to suit itself. A drug manufacturer, on the other hand, may quite freely choose its market and set its prices, subject to certain limitations on discrimination; it may keep what accounts it wishes, so long as in its own interest they meet standards required for desired tax benefits; it may finance with notes, bonds, or stock, so long as the issuance meets the information requirements of the Federal securities laws and the "blue sky" limitations of state laws. Although these regulations, controls through subsidies, and controls through other government policies affect all kinds of business, there still remains an important distinction in the kind of regulation affecting individual industries and firms.

The difficulty arises for the business manager, not only in the premising of the immediate future of such controls, but in the forecasting of their probable character and effect for a longer term. Naturally, this difficulty is the greater, the more a business is subject to controls and the less stable the controls. For example, the difficulty of forecasting what the government may do that will affect a long-range plan of a railroad is greater than the difficulties encountered by a toy manufacturer, if it can be assumed that detailed government controls will not be imposed on this industry. Both are concerned with the major regulatory and subsidy policies that affect business in general, but in addition the railroad company must reckon with the numerous special controls of the state commissions and the Federal Interstate Commerce Commission.

This difficulty is sharpened by the expanding position of the government in the product market. As many defense industries have found out, the government is no ordinary purchaser. As government purchases become large and more specialized and as the government takes greater safeguards to protect against undue profits or production departing from specifications, the business firm falls increasingly to the mercy of official controls. These, in turn, are far more than the pronouncements of the legislature or even of the department head but come to include the multitude of interpretations placed by commissions, boards, procurement officers, auditors, project engineers, and many others concerned with government supply.

Government fiscal policy. Closely related to the more direct problem of regulation or of government purchasing is the effect of government financial and tax policy. When the Federal government spent less than 5 per cent of the national income, as it did more than two decades ago, the effect of government fiscal policy on business was considerably less than when the expenditures ran to approximately 22 per cent, as they did in 1952. When the government becomes a major factor in income distribution, taxation, and investment, practically every business manager in the nation must premise government fiscal policy in developing his plans.

The important role played by government fiscal policy has significant planning impacts beyond the over-all effects. The imposition of excise taxes on certain commodities or services, the allowance of exemptions for small-company profits, the operation of excess-profits taxes, and special depreciation allowances for defense-plant investment are among the important administrative devices for distributing the tax load. These are often difficult to forecast, and accommodation of plans to their effects is a formidable task. Could the passenger-transportation industry, for example, have planned on the basis of continuing the 15 per cent tax on passenger traffic, originally designed to discourage travel, years after a surplus of passenger service existed? In 1952, should a business plan on the discontinuance of the excess-profits tax in 1953? In 1941, could a business planning expansion of capital facilities have foreseen whether there would be special allowance for accelerated depreciation and whether it would apply to wartime investment? And could a company have expected such treatment in the postwar period when the defense program was expanded in 1950?

Population trends. Among the best indicators of future markets for most businesses are population estimates, whether in terms of totals, composition, or location. While it is not always possible to translate accurately the effect of population changes on the market for an individual product or for the output of an individual firm, there are a large number of products in which population is a major determinant of demand.

Population trends are subject to fairly accurate forecasting for periods up to five years and to tolerably accurate forecasting for even much longer periods. For example, an estimate made in 1952 of population in the United States forecast a rise from 154.3 million in 1951 to 175.0 million in 1961.[6]

The United States Bureau of the Census, as well as other agencies, both public and private, make fairly complete and useful forecasts of population. While population trends may be upset by such major calamities as a world war and while such events as the extraordinarily heavy movement of population to the Southwest after World War II was underestimated, population forecasts furnish a reasonably reliable and usable set of premises for most businesses.

Employment, productivity and national income. Fairly reliable premises for the future can be obtained from well-considered estimates of employment, productivity, and national income. Given a certain population growth and some knowledge as to the age and sex composition of the population, and assuming that public policy will not permit more than a given level of unemployment, the total number of persons employed in all undertakings, both government and private, can be forecast. From employment data and estimates of annual increases in output per man-hour and of changes in the work week, one can calculate a gross national product[7] for the future at present levels of prices. To develop such a model is little more than a matter of mathematics if one has employment and productivity premises available.

Such a model has been produced for various times in the future by government agencies, individual economists, and private organizations. Perhaps one of the most interesting recent analyses, and one which can be used to illustrate this approach, was made for the National Planning Association in 1952.[8] This interesting study, while claiming not to be a forecast[9] but a model for full employment, summarizes the basic features of an economy in the United States in 1960. It is based upon certain assumptions: (1) that population will reach 175 million by 1960 and that the total labor force will be 69 million civilians; (2) that the United States government is committed to a policy of "full" employment, which is taken to mean a maximum of 4.0 per cent of civilian labor force as unemployed; (3) that the average work week will decline from 40.3 hours in 1951 to 39.0 in 1960; and (4) that the output per man-hour will increase at a rate of 2.5 per cent per year. Each of these assumptions represents reasonable estimates of trends and expectable government policies. With a base of 1951 data, these assumptions furnish the means for calculating a 1960 gross national product of 425 billion dollars in 1951 dollars, against a 1951 actual figure of 329.2 billion dollars. By similar calculations, the National Planning Association calculates gross national products for intermediate years.

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[6] "The U.S. in 1961," *Business Week*, May 24, 1952, p. 104. This estimate, from a study of the department of economics of the McGraw-Hill Publishing Company, was being widely used in 1953 and follows the forecasts of the Bureau of the Census. As might be expected, estimates of population vary, and there has been a tendency in recent years for estimates to be too conservative. For example, according to information received, the McGraw-Hill department of economics in 1954 raised its population estimate for 1961 to 177 million and agreed that 180 million is "probable."

[7] The total volume of production expressed in fixed-value dollars.

[8] Gerard Colm, *The American Economy in 1960*, Planning Pamphlet 81 (Washington: National Planning Association, 1952).

[9] Many of the premises of this study have been disputed and the results should not be regarded as widely accepted. Some forecasters consider them unrealistically high, and others find them too conservative.

Moving from the calculation of gross national product, the report presents a series of alternative models of the American economy in 1960, based upon various analyses of trends and assumptions, among which is a major assumption of a level of national security expenditures at 40 billion dollars. Combining the various features of the alternative models in a way to give a "feasible and sustainable pattern of economic growth," the report outlines an "adjusted" model for full employment in 1960, as shown in Table 8.

Table 8 and the assumptions on which it has been based are an interesting example of the use of national-income techniques to determine what the total economy may be under a given set of conditions. To the extent that these conditions are accurately prophesied, the model becomes a forecast. But, in any case, it points up the determinants of the national economy and can be useful to any business in making its forecast.

In addition, of course, to broad national income and employment forecasts, an industry and a company within an industry must be able to translate these data in terms of their impact upon the industry and their effects upon the business of the firm.

In recent years, so-called input-output studies made by government and other economists have proved to be extremely helpful. These analyses show the relationships of industries to one another and their sharing of the gross national product. The purchases of one industry from another and the sales made have been calculated in great detail for certain of the postwar years.[10] Although these data are for past years and do not represent forecasts, the relationships of industries and their sharing of the gross national product do not change rapidly. They can, therefore, be used as an interesting basis of forecasting future demand for an industry's product for three to five years in advance.

In addition, through government and other sources, a number of industry studies, both of a forecast and of a historical nature, may prove

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[10] For a description of these studies, see W. Duane Evans and Marvin Hoffenberg, "Interindustry Relations Study for 1947," *Review of Economics and Statistics*, vol. 34, pp. 97–142 (May, 1952).

Table 8. Adjusted Model for 1960 Compared to Actuals for 1951 (In Billions of 1951 Dollars) *

	Receipts		*Expenditures*		*Excess of receipts*	
	1951 actuals	*Adjusted model*	*1951 actuals*	*Adjusted model*	*1951 actuals*	*Adjusted model*
Consumers	225.0	307.6	208.0	291.1	+17.0	+16.5
Business	33.0	46.9	58.5	55.9	−25.5	− 9.0
Plant and equipment	...	...	36.4	41.4		
Inventory increase	...	...	10.3	2.9		
Residential housing	...	...	11.8	11.6		
International	...	...	.2	2.5	− .2	− 2.5
Government	69.9	70.5	62.6	75.5	+ 7.3	− 5.0
State and local	20.7	26.0	21.7	28.0	− 1.0	− 2.0
Federal	49.2	44.5	40.9	47.5	+ 8.3	− 3.0
Statistical discrepancy	1.4				+ 1.4	
Gross National Product	329.3	425.0	329.3	425.0	0.0	0.0

	1951	*Adjusted model*
Assumptions:		
Population	143.0 million	175.0 million
Labor force: total	66.0 million	72.5 million
Armed services	3.1 million	3.5 million
Civilian employed	61.0 million	66.2 million
Unemployed	1.9 million	2.8 million
Average weekly hours	40.3	39.0
Output per man-hour	$2.59	$3.24
Per capita consumption of disposable income	$1,348	$1,663
Per cent increase of per capita consumption	...	23.3%

* Gerard Colm, *The American Economy in 1960*, Planning Pamphlet 81 (Washington: National Planning Association, 1952), pp. 43–65.

helpful in developing planning premises for an industry. Some of these, such as the study of the President's Material Policy Commission, completed in June, 1952,[11] give a clear and expert view of the future demand for various materials. Other studies, such as those undertaken by the Office of Business Economics of the Department of Commerce, make useful analyses of growth trends in industries.[12]

Price levels. One of the most difficult premises to forecast is the course of future price levels and their effect upon the industry and firm. For fairly short periods, forecasts of price levels can be made with a tolerable degree of accuracy. But for periods beyond a few years, the course of price levels is not so clear. In some ways, however, the job of forecasting prices in general is not so difficult as it was two decades ago, since government fiscal policy plays such an important role in their determination. But the extent of deficit financing or the existence of surpluses, which may affect prices materially, are not too easy to premise. It is possible, however, to make a fairly good estimate of fiscal policies for the near term and thereby to forecast the general behavior of prices.

Over the very long term, experience has proved that the business that bases its planning upon a rising price level has been right. While periods of price recession have occurred and have often presented serious problems, especially for businesses in which inventories are extremely important, the course of history has disclosed a relentless depreciation in the value of money in all economies. There seems to be no reason for expecting this trend to change in the future. On the other hand, in the short term—approximately one or two years—forecasts of prices made by many government and business economists have shown a fairly high degree of accuracy. Through calculating the impact of deficit financing and the utilization of credit institutions, both government and private, the probable trend of prices for the immediate future is subject to a reasonable estimate. But the fact remains that accurate price-level forecasting is largely a matter of prophesying government policy.

The general business environment and the individual firm. As is clear from the above summary, a firm must translate general business environment into the probable effects upon its own problems and plans. This is an important and difficult step. But most managers are fairly familiar with the relationship of their firms to the industry in which they operate, and if they can forecast industry behavior, they will have gone a long way in premising the future of their own firms. The difficult problem is often to discover the impact of the general environment on the industry in which the firm operates.

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[11] Published as *Resources for Freedom*, 5 vols. (Washington: Government Printing Office, 1952). This study forecasts production and consumption of selected materials for 1975.

[12] See, *e.g.*, L. J. Paradiso and F. L. Hirt, "Growth Trends in the Economy," *Survey of Current Business*, vol. 33, no. 1, pp. 5–10 (January, 1953).

The key relationships of any industry to national income, the work week, population, and similar factors of the general business environment, if properly studied and recognized, can often make it possible for the planner to interpret industry development in terms of changes in the nature of the national economy. Freight-transportation demand, for example, shows a strong correlation with production, while passenger-transportation demand is correlated with national income. But the railroad manager who, in 1920, did not reckon with the private automobile and truck or who, in 1940, did not give attention to the impact of the airlines on passenger transportation could have been greatly misled by even the best estimates of national production or income. Hence the trends within broad categories of industry are important, as are new technologies, new products, and changes in public tastes.

Studies of industry trends, input-output analyses, and the many indicators and devices developed by astute planners in business have aided in bridging the gaps from broad industry forecasts to segments of an industry and, finally, to the company concerned. There are no formulas available for making this transfer. But careful study of firm and industry trends can give forecasts within a tolerable degree of accuracy. It must ever be remembered that forecasting is not an exact science and that the farther in the future a manager plans, the wider will be his margin of error. But one of the tasks of good planning is to recognize the width of this margin of error and to incorporate in plans the necessary safeguards, hedges, and flexibility, so that unavoidable error in prognostication will not lead to a crippling business loss.

Premises External to the Firm: The Product Market

The general business environment obviously furnishes the principal key to the forecasting of the product market of a firm. Of especial importance are such basic factors as national income, population, employment, and wage levels. The purpose of developing premises with respect to the product market is to determine the kind of market that the individual firm faces for the type of product or service it offers. This is basically a matter of determining industry demand, in the first place, and then demand for the individual firm and the planning strategies that must be used to gain a desired share of the industry market.

Industry demand. For most industries, there are a number of statistical series available through government sources, trade associations, or special economic studies showing product output, prices, employment, and, occasionally, costs. While these are usually of a historical nature, they often furnish a basis for forecasting industry demand, especially if factors such as new processes and techniques, shifts in customer tastes, national economic welfare, population changes, and similar items are considered. Moreover, for certain industries, comprehensive forecasts of demand have been worked out for the future. Such has been the case of key raw materials, a long-range forecast of the production and consumption of which was worked out in detail by the President's Material Policy Commission.[13] Similar studies have been made from time to time by government agencies for other industries.[14]

Of course, some of the larger firms can afford to develop, in comprehensive detail and after careful study, forecasts of industry demand. These forecasts can be found in any large, well-managed firm and furnish an important planning backdrop against which the demand for the firm's products may be forecast.

In the understanding of industry demand, it may be worthwhile to emphasize again the importance of interindustry relationships. Input-output analyses, which portray how products move between industries, are extremely helpful in forecasting industry demand, particularly for those industries that are not primarily dependent upon the ultimate consumer for their market.

Individual firm demand. The end purpose of all forecasts of industry demand is their use as a means of premising the demand for the product or service of an individual firm. Few businesses other than agriculture operate in a market that closely approaches perfectly competitive conditions. Almost all business firms face a demand which has varying degrees of elasticity and which, while derived from industry demand, is sensitive to the actions of the individual firm and those of its competitors. In other words, most business operates under conditions of imperfect competition. This requires special knowledge of customers' desires and their ability and willingness to pay, plus the actions and strategies of competitors in the field.

Customer data can be accumulated in many ways, although the time spent, the cost of discovery, and the value of the information are all highly correlated with the type of research and the intelligence with which it is undertaken. Every firm needs to know who its potential customers are, where they are, and what are the most effective means of selling them. Few enterprises are so small that they cannot take advantage of existing data, whether this be from government sources, from publications available in libraries, or from material collected by business associations.

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[13] *Resources for Freedom, op. cit.*

[14] See, for example, *Post War Traffic Levels*, Statement 4440 (Washington: Interstate Commerce Commission, 1944) and *Air Traffic Forecast* (New York: Port of New York Authority, 1950). The latter study undertook to forecast air traffic for the period 1950 to 1980.

If a firm cannot spend anything to find out about its customers, its best basis for premising plans will be to imitate competitors, on the assumption that the latter have discovered the proper outlets and the best means of selling them. A second method would be to experiment to a limited degree, to ascertain by trial what the best methods of sales and product offerings are. But where the firm can afford to do so, clearly the best course of action is to engage in enough market research to make reasonably sure what the market facing the firm is and likely will be. Such research normally involves a considerable cost, and small firms that attempt to research all but the simplest markets may well find that a major portion, or all, of their resources have been devoted to determining the demand. One of the lessons that comes from small-business operation is that market research, albeit desirable for good planning, must be engaged in sparingly. Such market research as is done can hardly be more than a general estimate of a situation or the close watching of successful competitors to determine their policies.

Those external planning premises relating to competitors are concerned also with such factors as their production methods, costs and profits, the trend of their position in the market, and their reaction to a new firm's entering the market or an old one's expanding into new territory.[15] Admittedly such data are not easy to obtain, although the information gleaned from business luncheons, cocktail parties, informal conferences, and similar channels can often give the astute observer fairly accurate information on which to premise his competitors' behavior. Furthermore, much of the information needed can be inferred from the activity of competitors in the market, from data found in financial reports, and from studies of the market share of each firm. In addition, there are certain industries where data of this kind are in the official records. The so-called regulated industries, such as the railroads, airlines, and public utilities, file detailed reports of their business activities with state and Federal commissions; these reports are public property, open to the use of any competitor desiring them. Moreover, even in some nonregulated industries cost or production information or data on wage policies and payments are freely exchanged between certain firms or through the medium of trade associations.

PREMISES EXTERNAL TO THE FIRM: THE FACTOR MARKET

Among the external premises, the determination of which is necessary for effective planning, are those that have to do with the acquisition of goods and services by the enterprise. In a very real sense the factor market is that which the economist refers to as land, labor, and capital. It is preferable from the standpoint of business management, however, to refer to the factor market as applying to business location, the labor market, the sources of materials and parts, and the availability of capital. While not all aspects of these factors are external to the firm, the concern at this point is to emphasize those that are not within the control, through internal decision, of the firm.

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[15] On this problem, see especially N. Kaldor's articles, "Market Imperfection and Excess Capacity," *Economica*, new series, vol. 2 (February, 1935), and "The Equilibrium of the Firm," *Economic Journal*, vol. 44, pp. 60–76 (March, 1934).

Business location. The physical location of a place of business is subject to several forces that are generally uncontrollable as far as the enterprise is concerned. Among the more important are transportation, the existence of complementary industry, the availability of special skills and services, and the local political environment. Moreover, when it is recognized that location, once decided upon, tends to involve a decision not easily changed, because of the sunk nature of costs in developing business at a given location, the special importance of locational premises becomes apparent. There are probably few more inflexible elements in planning than plant site.

The existence of transportation facilities and the costs involved become a primary consideration in location. Where the transportation of a given raw material important to a firm's production involves a large enough expense, this factor alone may determine the business's location. Or, as is more likely to be the case, location may be dictated by a balance between the costs of transporting raw materials and the cost of shipping finished goods to the market. As Weber pointed out some years ago, an industry tends to be pulled toward the source of raw materials where there is extensive shrinkage in weight in the production process and toward the markets where raw materials are ubiquitous or where there is little or no loss of weight.[16] These tendencies are generally followed, although the development of freight-rate structures to meet market competition and the existence of various levels of intercarrier and intracarrier competition have reduced the effect of pure weight on industrial location. Nevertheless, it is a rare industry that can afford to overlook the costs of transportation in determining location.

A second force strongly influencing location is the existence of complementary industry. One has only to look at the concentration of the automobile industry in the Detroit area, the aircraft industry in Southern California, or the steel industry in the Pittsburgh and Chicago areas to realize that a business firm intending to service these industries or to use their products may find a strong reason for locating in the area. This is a matter not only of transportation but also of being near markets, of being in close communication with the industry, and of drawing upon the know-how and skills that tend to grow up in such locations. There are, for example, many companies that felt forced to establish West Coast branches in recent decades as their markets became concentrated in that area. One specific case was that of a manufacturer of very small electric motors, which had a large use in the aircraft and missile industries. Originally located on the East Coast and quite able without transportation disadvantages to ship its product to West Coast users, the company nonetheless found that certain manufacturers preferred to work with West Coast plants because of the ease of handling design improvements, inspection, and similar aspects of supply control.

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[16] *Theory of the Location of Industries* (Chicago: University of Chicago Press, 1929). In this book, originally published in German in 1909, Weber comes to other important conclusions regarding the effects of weight-loss, material availability, and other factors on location.

The location of complementary industry has a pronounced influence from the standpoint of the availability of skills in an area. The development of a labor force in a certain locality competent in the production of a given item may well be a dictating premise upon which to plan expansion of that kind of product. Until World War II and the subsequent expansion of defense production forced the training of skilled persons for various industries throughout the country, there were a number of industries in which virtually all the know-how was concentrated in a few cities. While this concentration has been dispersed somewhat in such fields as aircraft and electronics, there are still cases where it is an extremely influential factor. The dress and suit industry, glove making, the textile industry, and even much of the heavy machinery industry are examples.

Along with the availability of skills, the existence of local services is important. The tool and die firms, the job machine shops, the screw machine companies and foundries, to mention only a few, become significant factors in favoring the location of certain kinds of plants in areas where these supplementary companies may be found. A plant dependent upon these services and located where they are not available would be at a serious disadvantage.

Nor can one overlook the importance of the local political environment to business location. A city with a reputation for honest and fair dealing with business will be preferred by most businesses over a city riddled with machine politics and graft. These are often difficult facets of the planning background to premise for the future, but they are unquestionably significant aspects of location.

The labor market. In addition to the importance of availability of skills in an area, a prominent consideration in planning is the nature of the labor market in terms of the quality, stability, and adequacy of the labor supply. The quality of labor available for given kinds of operations does vary between areas and between groups in a given area. For example, an airline once found that the quality of maintenance mechanic labor available on the West Coast was superior to that in the New York area, probably because of the larger reservoir of trained workers on the West Coast and the fact that mechanical personnel could be more easily recruited in the airport area. Furthermore, the quality of labor depends upon the type required. If financial training is a prerequisite to the jobs called for by a plan, this labor would be more available in and around the larger financial centers.

In addition, labor stability has varied between areas and between groups. Some areas have records of many work stoppages and difficult labor relations. Among some industries, white-collar workers feel themselves to be wage earners dependent upon strong union leadership for their guidance, while in other industries these workers have a tradition of allying themselves with the management of the companies.

Above all, of course, the quantity of labor available at a price becomes a significant aspect of planning. While the growth of unionism and the widespread development of defense industry throughout the country during and after World War II have had a leavening effect on wages, before World War II there were widespread differences in sections of the country with respect to wages. Even now, some differences exist, and they may be important in planning. It is true, for example, that a company located in almost any larger city of the country may have to pay somewhat higher labor rates and executive salaries than companies whose operations are in the smaller or rural communities. But even though this difference in pay scales exists, it has tended to become less prominent, and the shortage of labor since 1941 has been so pronounced that the quantity of labor available has overshadowed rates in premising the labor market.

Sources of materials and parts. Among those premises external to the firm that influence planning are the sources of materials and parts. As pointed out in the discussion of business location, this is largely a problem of transportation. Sources become of major importance when transportation costs are controlling factors in the economics of the firm. But even in cases where raw materials are heavy and transportation costs high, efficiencies in transportation may not make the location of sources of supply controlling. The steel industry has found that it can import Venezuelan ore efficiently and a West Coast oil refining company found that it was not at a serious disadvantage when it had to obtain a high portion of its crude oil from the Near East rather than from the California oil fields.

The existence of sources of materials and parts is, nevertheless, important in planning. Despite transportation efficiency, cost differentials do exist. Furthermore, the nearness of a source of supply makes it possible better to control design, quality, and delivery. No transportation system can assure adequacy of supply of materials and parts. If the supply is inadequate and if the firm cannot produce its own supply efficiently and quickly enough for its use, it can hardly continue production. Many of the early post-World War II firms that went into the manufacture of television sets failed to give enough weight in their planning to the availability of picture tubes; and without this important part, they could not reach volume production even if they had been able to solve all other problems of production and marketing.

Capital availability. At first glance, it may appear that a firm has many options in raising capital. Such sources as bank loans, mortgages, factoring of accounts receivable, accounts payable, the securities markets, and direct and indirect government financing may come to mind. And if a firm could actually choose from among these possibilities, there is little doubt that it would favor a low-cost source of funds with the minimum threat to financial control of the enterprise.

But despite the economists' reference to a "supply" of capital, which implies that capital can be had at a price, there are in fact serious discontinuities in the capital market. A small firm, for example, whose owners do not wish to give up control usually has, as practical sources of capital, the capital of the principal owners, retained earnings, borrowing on real estate and other pledgeable assets, factoring accounts receivable, limited commercial bank loans (which are normally designed to finance operations and not for investment), moderate loans from friends, and occasionally, if a defense contract is involved, a limited government-guaranteed bank loan that shows promise of being liquidated during the life of the contract. Even larger firms with established reputations and availability of public financing through sales of stock or bonds suffer from some discontinuities in the capital market. There is almost invariably a limit to the amount of new financing that can be undertaken, either by debt or equity capital, and this limit is a varying thing, depending upon the fortunes of the company and the receptiveness of the market to new financing at any given time.

Capital availability is often the controlling premise of external planning. Particularly with small and medium-sized businesses, the limits to availability of capital are reached at a relatively low level, and often far sooner than the enthusiasm of their expansion-minded owners will admit. The writers have seen a number of small businesses reach the limit of their expansion, and often overreach it, because of the unavailability of capital. Moreover, the difficulty often is not that capital is not available but rather that providers of important capital properly wish to accompany their investment with a degree of control, a desire that proves unpalatable to the firm's owners.

Premises Internal to the Firm: The Sales Forecast

As in the case of external planning premises, it will not be possible to deal with all the various premises internal to the firm. Among those that deserve special attention, however, is the sales forecast. To a very real extent, the sales forecast is the basic planning document of the typical firm. It is in a sense both a plan and a planning premise. But because it sets the framework on which most internal plans are constructed, it is regarded here as the dominant planning premise internal to the firm.

Nature of the sales forecast. The sales forecast is a projection of expected sales of a company, by product and price, for a number of months or years. It is, then, a kind of *pro forma* sales portion of the traditional income statement for the future. Given a sales forecast over a long enough period in which it has some confidence, a management can usually do a rather fair job in forecasting profits and cash flow from the enterprise. In other words, the revenue side of the future is usually the most difficult to forecast and the least subject to positive control by the firm. Given the revenue outlook, the firm can at least decide what it can afford to spend for operations. Moreover, since most operating expenses are within the control of management to a major degree, the forecast of expenses can be more accurate than a forecast of revenues.

In any case, it is the sales forecast that must set the stage for internal planning. Business expenses, capital outlays, and policies of all kinds are made for the purpose ordinarily of maximizing profits obtainable from expected sales. Whether this forecast is for a period of months or for a period of years, it is the key to future business plans. There are some enterprises, however, that may need to pay little attention to a market (for example, the small city water company or the government defense contractor with a long-term order that has little chance of being canceled or modified), and these enterprises think of the forecast task as one primarily of estimating future expenses. However, it is a rare business that can overlook the market for long. Even the farmer who, operating under support prices, may have a guaranteed market for a certain product for a coming year, can hardly overlook market influences as they affect succeeding years or alternative crops.

Sales forecasting practices: Eastman Kodak Company.[17] To understand sales forecasting techniques, one might examine what some of the larger companies do. Eastman Kodak, for example, has a staff that prepares a forecast of general business conditions referred to as an "assumption about the future." From this premise of the external business environment is projected a forecast of future product sales. At this point the staff takes into account the various factors, both external and internal, that might bear upon this picture, such as prices, production capacities, markets, technological changes, competition, and sales promotion plans. These factors are then combined to bring about the sales forecast.

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[17] Material on Eastman, Electric Storage Battery Company, and SKF Industries has been obtained from an excellent study, "Streamlining the Sales Forecast," *Dun's Review and Modern Industry,* August, 1953, pp. 42–45.

The reader should not gain the impression, however, that these calculations are mechanical. The basic assumptions for the future are arrived at by the staff after consideration with upper managers of levels of gross national product, disposable income, price indexes, and other basic economic conditions. Then, before the forecast has been formalized, a series of meetings is held with sales and other personnel of the company, to make sure that all factors have been properly considered. Conferences are also held with staff specialists in production, advertising, research, costs, and pricing. After the version of the sales forecast weathers these discussions, it goes to the finished products committee of the company, which includes on its membership several vice-presidents. When this committee has approved or modified the sales forecast, it then becomes a guide for all managers in planning their budgets and operations.

Sales forecasting practices: Electric Storage Battery Company. A technique somewhat different from that followed by Eastman, and one found quite often in industry, is that used by the Electric Storage Battery Company of Philadelphia. The initial forecast is made by the salesmen in the field for each of their territories and then modified by the product managers and the sales vice-president to correct for known optimism or pessimism of certain of the salesmen. A second forecast is prepared by the company's economists after careful study of economic and market statistics, based on combination of historical series and judgment of future conditions as they might affect the company's markets and products. Supplementing these two forecasts, the company utilizes sampling techniques to determine actual markets for their products, as disclosed by plans and practices of industrial and other customers.

With these three forecasts, all of which are prepared independently, the company top management then holds a conference at which the various predictions are appraised and modified. The resulting forecast then becomes the basis for company planning and operations.

Sales forecasting practices: SKF Industries. Another variant is the procedure of SKF Industries. In this company, as in the previous example, three sets of sales forecasts are prepared. But in SKF, one set is prepared by industry specialists in home-office sales departments, another set by the commercial research department, and still another by the salesmen in the field. These sets are all submitted to the sales manager, who presents all three, plus a forecast that reconciles differences, to the sales vice-president. This latter executive checks or modifies the forecast submitted by the sales manager and after approval submits the completed forecast as the planning basis for company operations.

The procedure at SKF can probably better be shown in Figure 20:

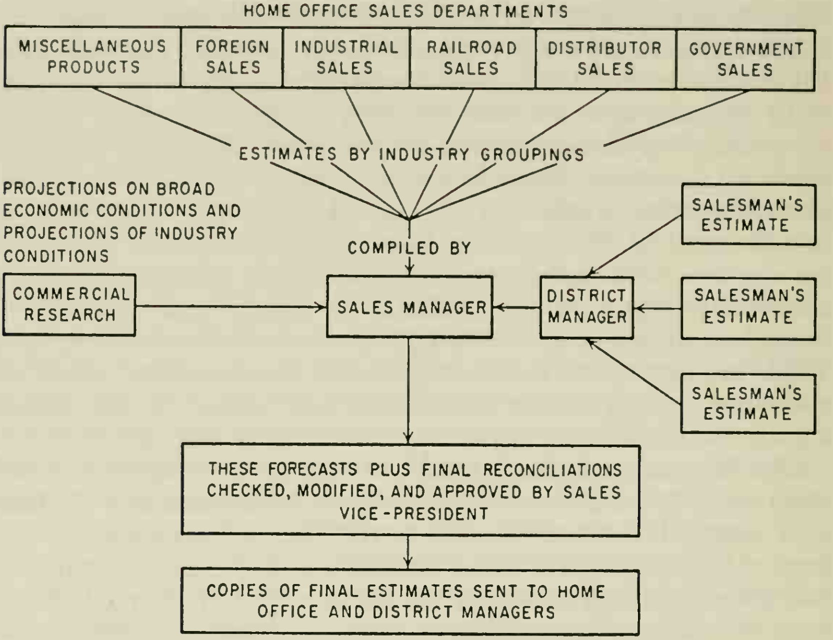
HOME OFFICE SALES DEPARTMENTS
MISCELLANEOUS PRODUCTS
FOREIGN SALES
INDUSTRIAL SALES
RAILROAD SALES
DISTRIBUTOR SALES
GOVERNMENT SALES
ESTIMATES BY INDUSTRY GROUPINGS
PROJECTIONS ON BROAD ECONOMIC CONDITIONS AND PROJECTIONS OF INDUSTRY CONDITIONS
COMPILED BY
COMMERCIAL RESEARCH
SALES MANAGER
DISTRICT MANAGER
SALESMAN'S ESTIMATE
SALESMAN'S ESTIMATE
SALESMAN'S ESTIMATE
THESE FORECASTS PLUS FINAL RECONCILIATIONS CHECKED, MODIFIED, AND APPROVED BY SALES VICE-PRESIDENT
COPIES OF FINAL ESTIMATES SENT TO HOME OFFICE AND DISTRICT MANAGERS

Fig. 20. A procedure for sales forecasting.

Effectively making and using sales forecasts. Since the sales forecast is so important a tool, there is hardly a company that should not take the time and trouble to make the best one its limited resources will permit. Even the company with a fairly large backlog of orders for custom-made goods that need not go on the shelf as inventory has a need for such a forecast. One of the authors recalled a company that simply measured its future sales by the size of the total sales backlog. Although this company's backlog remained high, its managers were surprised to find one day that the backlog was for a limited number of products and with delivery times over so long a period that the total dollar amount of the backlog would not make possible capacity operation of the machinery and manpower then being employed.

One mistake often made in developing sales forecasts, especially by the smaller companies, is that of believing that they are too expensive and of overlooking the variety of sources of data available at little or no cost. The purchasing agent, members of the sales staff, the treasurer, and the production manager are among those persons within a company who may have possession of bits and pieces of information that, gathered together, could make an acceptable sales forecast. Moreover, the wide range of information available from government and industry sources is neither difficult nor expensive to obtain.

Furthermore, there is some advantage in any company in having the sales forecast made by as many persons as possible. Since this forecast becomes the basic internal planning premise of the firm, participation by as many key executives and staff personnel as possible will lead to better acceptance of the forecast as a guide to planning, as well as make it, in all probability, a more accurate representation of the expected company future.

PREMISES INTERNAL TO THE FIRM: OTHER PREMISES

Although the sales forecast is the primary blueprint for most business planning, there are many other premises internal to the firm. Practically every decision and every plan becomes a planning premise for other plans. Precedents are set in various policy decisions as they are made, day after day, year after year. The various commitments made for machinery, equipment, real estate, training programs, profit-sharing plans, or wage-incentive programs also establish sets of premises against which future planning must be made. Some of these policy and program decisions *need* not influence future plans, since changes in direction and policy can be accomplished, but inflexibilities develop out of past actions that are difficult in many cases to change. Other policy decisions, such as the investment in expensive single-purpose or limited-purpose machinery or equipment, may actually tie up so much of a firm's capital as to constitute an inflexible premise for future planning.

While these internal planning premises are equal to the number of decisions taken in a business firm, the more important of them fall in the categories of capital investment, basic policies—past, present, and future—and supply factors, in addition to the market factors already discussed.

Capital investment. One of the important areas of internal planning premises that materially affects future planning is that of the decisions made with respect to capital investment. A commitment made in a fixed factor of production, such as land or capital, tends to have a long-run influence, since this investment is normally only recovered through use over time and by the writeoff involved in depreciation allowances. While capital so invested may be recovered by sale of the asset, this is often not a practicable alternative, unless the asset has many uses, for the liquidation value of capital assets is usually well below original cost. As has already been indicated, the sunk nature of this investment will depend upon the limited or general use that can be obtained from the building, land, equipment, or machine. Consequently, in developing plans for the future, a business enterprise must weigh carefully the commitments that have already been made in capital equipment and modify these plans to make the best possible use of this equipment.

This does not always mean that future plans need to be tied to these past commitments. Often it is good economics to junk an important investment in order to take advantage of new methods or devices. But when it is considered that every business is limited in the amount of capital available, clearly a decision to take a sizable loss on an investment requires careful consideration. The importance of these sunk costs, then, demonstrates not only the need for studying significant capital investments but also the need to consider paying more than is necessary to retain flexibility. It is for this reason that many firms hesitate to squeeze the last degree of specialization from equipment and choose instead to gain less efficiency and retain a higher degree of flexibility. For example, a manufacturing organization may pass by the expensive and highly efficient single-purpose machine in favor of the less efficient, but more widely usable, multipurpose machine.

However, there is often a limit to which a firm can go to gain this kind of flexibility. An airline might wish to have a single-seat airplane, so that it could easily adjust its operations to the exact number of passengers that might desire transportation. But this type of plane would be so expensive to operate per passenger-mile, compared to a 40- or 50-seat craft, that there is no practicable alternative but to invest in the larger, more expensive, and more efficient planes and assume the risks of inflexibility.

Basic policies. Plans for the future are also subject to conditions that arise as the result of basic policies. Product policies, distribution policies, labor policies, financial policies, and many others are often fixed, in the sense that they cannot be readily changed. A firm that decides to cater to the lower-quality trade and builds its product and distribution policies accordingly is ordinarily in no position to make a change to the high-quality market without considerable investment and time. A firm that has decided to institute a profit-sharing plan may find it difficult to change its direction. Or a firm that has built its reputation on undercutting its competition may find it practically impossible to depart from this policy. Policies such as these define the character of a business, the personality of the firm. They become an important aspect of the internal planning background of the firm. While they can be changed and are, at least to some degree, controllable, they nonetheless are an essential part of the background against which planning must be undertaken.

Supply factors. One of the more significant areas of premises external to the enterprise are those that have to do with sources of materials and parts. To some extent, however, these sources may be within the control of the firm and hence be premises internal to the firm. A business sometimes has alternatives to the acceptance of supplies externally. These consist of integration and actively cooperating with a source. The former alternative is very well known and can be found in practice in the large industrial empires so common to American industry. Less well known, but increasingly evidenced in recent years, is the realization of the importance of discovering and taking care of desirable sources of supply. Many of the larger manufacturing enterprises have aided smaller firms to become reliable sources of supply, and the large mail-order houses have had a definite program for developing reliable and well-managed sources. Hence, whether the sources of supply are obtained through integration or through conscious development, they furnish a significant area of planning policy that may be internal to the firm as well as external in nature.

Planning Premises: Some Conclusions

Plans deal with the future, and the future is an unknown quantity. This simple fact probably accounts as much as anything for the fact that many managers act only on the basis of present phenomena and consequently find themselves engaged in "fighting fires" and meeting crises. It is easy to follow the practice of solving problems as they arise. But, as has been abundantly shown, managing, to be effective, must plan in order to avoid such problems.

The manager must decide upon the kind of a future against which to make his decisions. The job of planning is simplified if its premises are clearly set forth. Moreover, there can hardly be any doubt that, if these premises are accurate, the task of planning, in addition to being facilitated, will also be accurate.

The accuracy and reliability of forecasting, therefore, lies behind good planning. As forecasting techniques are improved, that major portion of planning which depends upon forecast events and facts will be improved. But complete premising is more than forecasting, since established and expected policies, facts as to capital investment, and other matters not usually thought of as forecasting also constitute the background against which future planning must be undertaken.

Furthermore, because the future cannot be foreseen with accuracy, it is usually good business planning to have alternative sets of premises and alternative plans based upon these. If a major event, such as war or depression, cannot be foreseen with a fair degree of accuracy, sound planning may require that alternative plans be established on such varied assumptions as war, peace, peace with large defense spending, full employment, prosperity, depression, rising prices, falling prices, or other major political or economic events. The ideal kind of business planning is one in which alternative plans are ready whenever basic premises change. However, the necessity usually exists for making decisions that bring inflexibilities in planning. There comes a time when the manager can no longer wait to order construction of a new plant, hire and train a new staff of specialists, or embark upon a sales promotion campaign. When such decisions are made, the range of alternative plans tends to be narrowed, as are the premises upon which they are based.

Selected References

Bratt, E. C., *Business Cyles and Forecasting,* 3d ed. Homewood, Ill.: Richard D. Irwin, Inc., 1948.

Business Forecasting: A Survey of Business Practices and Methods. New York: Controllership Foundation, Inc., 1950.

Colm, G., *The American Economy in 1960,* Planning Pamphlet 81. Washington: National Planning Association, 1952.

Hempel, E. H., *Top-management Planning,* Chap. 4. New York: Harper & Brothers, 1945.

Henderson, R. D., "Current Sales Forecasting Procedures," *Advanced Management,* vol. 15, pp. 17–20 (June, 1950).

Lloyd, L. E., "Planning for Action: From Business Forecast to Company Program," *Business Planning in a Changing World,* General Management Series, No. 167. New York: American Management Association, 1953.

Redfield, J. W., "Elements of Forecasting," *Harvard Business Review,* vol. 29, no. 6, pp. 81–91 (November, 1951).

"Streamlining the Sales Forecast," *Dun's Review and Modern Industry,* August, 1953.

Wright, W., *Forecasting for Profit.* New York: John Wiley & Sons, Inc., 1947.

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POLICY FORMULATION

Policies have been defined as basic guides to thinking and action and, as such, are a major ingredient of all plans. They furnish the guiding element that gives direction to plans, just as planning premises provide the background against which plans are made.

Because of so central a role in planning, policy formulation is sometimes conceived of as the entirety of planning. It can readily be seen, however, that plans involve much more than guides to thinking and action, although plans that have not been developed to effectuate and reflect policies will almost certainly be haphazard or fortuitous. But plans involve procedures, budgets, assembly of resources and people, and programs, as well as policy, so that policy formulation can hardly be regarded as the whole of planning. Nevertheless, policies are the maps that show the way toward the development of plans, the solution of business problems, and the attainment of enterprise objectives. In guiding the way and defining the scope of plans, policies thus become an integral part of plans.

Policy Development

Policies do not just happen. They are made by someone at some time inside or outside the enterprise. Moreover, policy making is not an area reserved, as is often thought, to top-management personnel. While the higher a manager in the organization structure, the more important his role in policy making, policy is normally made at all levels in an organization. Even though a manager at the lowest levels may only utilize policy furnished to him by superiors in developing his plans, there seldom exists a manager who does not at some time make policy, even though it be of a limited nature and applicable to a small portion of the enterprise.

To understand the nature of policy and its development, it may be useful to analyze the ways policy arises in an enterprise. On this basis, policy may be classified as originated policy, appealed policy, and imposed policy.[1]

Originated policy. Perhaps the most significant source of policy is that originated by managers within the company itself for the express purpose of guiding themselves and their subordinates in the operations of the business. Originated policy flows basically from the objectives of the enterprise, as these are defined by the top executive authority of the company, whether it be the board of directors (as would be the case where this group exercises its intended function), the president, general manager, or other chief executive officer. This original policy may be broad in scope, allowing key subordinates to give it clearer definition, or it may be promulgated so completely by the chief executive as to leave little room for definition and interpretation by subordinates. The extent to which this policy formulation is centralized or decentralized is obviously dependent upon the extent to which authority is concentrated or dispersed. But the establishment of clear policies is one of the best means by which the top manager in a company or a department can delegate authority and still maintain control.

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[1] For an excellent discussion of this development of policy and the use of these terms, see E. Petersen and E. G. Plowman, *Business Organization and Management* (rev. ed.; Homewood, Ill.: Richard D. Irwin, Inc., 1948), Chap. 12.

But whether the policy formulation function in an enterprise has been centralized or decentralized, that policy which is developed by the manager for the guidance of his subordinates is originated policy. It may then be originated at any level of management. Furthermore, in characterizing certain policy as originated, one does not necessarily imply that it is imposed by command. Many are the adroit managers who originate policy and obtain compliance with it by making unobtrusive suggestions. In fact, some skillful managers may originate policy and secure compliance even when the subordinate manager leaves a conference with the belief that he originated the policy. But often the policy must be imposed upon subordinates with a force and clarity that permits no deviation. Thus, a president of a company might originate a policy of using sales agents on a commission basis, rather than full-time sales personnel, merely making indirect suggestions along this line to his sales manager. But he might be positive and blunt in stating the policy that the company will not engage in sharp dealings to make a sale.

Appealed policy. A large area of policy in the typical enterprise comes from the appeal of exceptional cases up the hierarchy of managerial authority. If an occasion for a decision on a business matter comes to an executive who does not know whether he has authority to make a decision or does not know how this matter should be handled to support the company's objectives, he may appeal it to his superior. As appeals are taken upward in a business organization and as decisions are made on these appeals, a kind of common law is established in the enterprise. Precedents develop, and these precedents become guides for later actions of managers.

One of the difficulties encountered with policies developed from appeals is that they are sometimes incomplete, uncoordinated, and confused.

If decisions are made on a given set of facts and without consideration as to how they might affect other aspects of the operation, or if unintended precedents develop from such decisions, the policies actually guiding the thought and action of subordinates may not be the kind really desired by top managers. Moreover, policies may be formulated about which the top executives do not even know.

The aimless formulation of policy arising from appeals explains in part why it is usually so difficult in business to know exactly what policies do exist. As analysts have come to find out in attempting to compile policy manuals, many managers simply do not know what the company's policy is in many areas. This difficulty arises partly from the fact that policy formulation is by its nature a complex task, covering as it does so many areas for decision making. But it also arises from the fact that many managers dislike to meet issues until forced to do so and may thereby delay policy making until a body of precedent from individual decisions constitutes the policies.

Policy formulation from appeals *may* be foresighted and internally consistent, especially if the manager realizes that his decision in a matter constitutes policy. However, where the manager finds himself constantly making policy by the appeal process, he might well ask himself whether he has left too large an area of policy making to chance and whether his subordinates have understood the policy he has formulated.

Externally imposed policy. To an increasing extent, particularly in business organizations, policy is being imposed on the enterprise by some external force, notably government, trade unions, and trade associations. The myriad of government controls are all too common evidence of the imposition of policy on business firms. Whether these controls are in the form of direct regulation, competitive force of a government-owned or government-supported business, or as the result of some of the many conditions for accepting government aids or contracts, the result is to circumscribe and dictate many aspects of business policy. As has already been noted, strong national unions operating through collective bargaining and detailed labor contracts have also imposed upon the business manager many policy determinations he might not otherwise make. Then, too, the fifteen thousand local, national, and regional trade associations have their effect, in varying degrees, on business policy. There are other social groups, such as the church, school, fraternal and social organizations, and charitable institutions, that mold or dictate business policy.

All in all, the area of policy imposed on the business manager by these external social forces has been rapidly expanding, so that few major policy decisions are made without regard to them. They affect policy making in two ways. Sometimes specific policies are dictated by these outside forces. In other cases, conditions are created which mold managerial decisions.

The Areas of Policy Formulation

While it would be impossible to discuss all the areas of policy formulation in the typical business enterprise, since they encompass every type of activity undertaken by the firm, it is practicable to mention a number of the areas common to most firms.

These areas may be classified into two broad groups. One group has to do with those policies related to the managerial functions themselves. They are the policies with respect to planning, organizing, staffing, directing, and controlling. To a very great extent, these policy considerations are the subject matter of this book, for the functions of management require planning, and this planning necessitates decision as to policies for guiding executives in their job of managing.

Another broad classification of policies has to do with the functions of the enterprise, those characteristic things that are done in business firms to gain their objectives. This broad grouping of policies may be further classified into sales, production, finance, and personnel and public relations.

Policy Formulation: Managerial Functions

Since questions of policy arising in connection with the managerial functions are discussed elsewhere, only a few major matters need be mentioned here.

Planning. Every enterprise and every manager within the enterprise must formulate policies, whether few or many, with respect to their planning activities. Among some of the policy questions that must be decided are the length of time for which to plan, the amount of detail or the thoroughness of plans, the effort and cost to expend on planning, the extent of organizational participation in planning, and the degree of flexibility to attempt in view of the usual costs involved.

Organizing. Likewise, there are a number of policy questions involved in the function of organizing, both in the sense of over-all organization of the enterprise and the organizing activities of every manager at every level of organization. For example, a manager must decide between limiting the span of management or lengthening the lines of communications, particularly in the large enterprise. He must develop policy as between taking advantage of the logic and specialization of functional departmentation or of utilizing product or territorial departments to gain the advantages of management development, incentive, attention to local conditions, and the breaking up of the enterprise into a number of self-contained organizational units. One of the manager's most important areas of policy formulation is the determination of the degree of dispersal of authority throughout the organization and, if it is to be decentralized, the way to maintain some centralized control. His policy on the use of staff assistants and on the establishment of departments with functional staff authority is likewise an area that every manager, particularly those at the top of the organization, should develop and effect with care and skill. In addition, policy questions arise as to the use of committees or other group decision-making devices, balancing the advantages of group judgment and participation against the loss of time and the resulting indecision. Furthermore, in every organizing process there arise questions of policy representing such matters as the clarification of relationships, the use of organization charts, and the maintenance of organizational flexibility.

Staffing. The staffing function also requires many policy decisions in order that its operation be planned. Among the more important of these policy areas are the techniques and methods to be applied in selection. To what extent shall the manager be bound to the policy of promoting from within? To what extent shall the man be hired to fit the job or the job modified to fit the man? What is the enterprise policy on training and development and its policy on hiring the untrained or looking for persons who have received the requisite training elsewhere? Then, there are necessarily a group of important policy questions in the area of incentives. What is the company's policy with respect to building and developing the manager's status, his security, or prestige? What is the policy toward financial incentives in terms of salaries, bonuses, stock options, or other devices designed to supplement heavily taxed current incomes? Policy problems also arise in regard to managerial job evaluation, promotion practices, and periodic review of performance, salary, or position.

Directing. Policies in the area of the managerial function of direction tend to reflect organizational relationships and also the leadership qualities of the top management. If authority has been decentralized in an organization, policies with respect to direction may not be sharply defined, because individual managers will have more freedom to handle their jobs in a way that appears best to them. Moreover, direction policies will be affected by the freedom and ease of organizational communication. If lines of command are sharply drawn and channels of information are (often erroneously) made to follow lines of authority, the manager will tend to require his subordinates to hew closely to these lines. If information lines are free, his policy will doubtless be to direct subordinates in a much less restricted manner.

But perhaps the primary determinant of direction policy is the leadership of superiors, from the top of an organization to the supervisor. Whether the manager adopts the policy of autocratic direction, rather than democratic or consultative, will depend largely upon the nature of the leadership furnished him. Of course, other factors affect direction policies. A superior with a group of high-level scientists reporting to him may be forced to adopt direction policies and techniques of a consultative or even free-rein nature. Moreover, the task to be done affects the policies developed. Where uniform and disciplined action is required, as in the case of the armed services in combat, the direction policy must be based upon autocratic principles.

There are many other policies that may bear on the character of managerial direction. They include such policies as whether and how to coach subordinates, the extent and nature of informing them, and the various decisions that must be made in determining how best to obtain a coincidence of individual objectives with those of the firm or the department.

Controlling. Most of the problems of policy making arise in the subject matter of control rather than in the function of control itself. Although control tends to be largely technique, there are, nevertheless, questions of policy involved. Some of these are similar to the policy questions arising in planning, having to do with the amount of detail, the length of time in the future, the expense of control, and the extent and nature of participation in the development and exercise of controls. Other policies have to do with the questions of whether to use budgetary control devices at all or of how extensive to make them. Still others are necessary to decide where in the organization structure to apply a special kind of control. For example, should the control over capital expenditures lie exclusively with top management or should it be at least partially decentralized? Should the factory manager have the final authority on quality control, or should the top quality-control manager report to the vice-president in charge of manufacturing?

But, assuming that top management understands the necessity for effective control, the policy questions arising are likely to be largely matters of *how* to accomplish this function effectively and efficiently. The major questions therefore tend to rise from the techniques of ascertaining strategic control points and obtaining needed information for their control, in establishing organizational lines so that responsibility for control is well placed and information available, and in balancing advantages against the costs of control.

Policy Formulation: Sales

As pointed out above, the subject matter of policy formulation may be classified along the lines of enterprise functions. These may in turn be classified as sales, production, financing, and personnel and public relations. Within the functional area of enterprise sales, a large number of policy questions exist, only a few of which can be mentioned here.

Product. Perhaps the most important single area of company planning has to do with its product, those goods or services offered for sale by the firm. The nature of the product naturally determines the kind of production facilities and organization needed, gives shape to the financial problems involved, and furnishes the basic background against which all other policy questions must be determined. The success of planning and policy formulation in the product field and the success an enterprise has in marketing its product will probably determine, more than any other factor, the profitability and stability of the firm. Rapid changes in technology and demand mean that the management of a company must be ever alert to the quality of its product planning. Furthermore, as Joel Dean has pointed out, product policy is also significant for the entire economy, since it is "the mainspring of economic progress and hence an important test of the company's social contribution." [2]

The problems of policy formulation regarding product have to do with (1) guides for selecting the item to be produced and the line of products to be offered; (2) policies for producing the good or service; (3) determination of policy for pricing; (4) policies with respect to selecting the channels for distributing the product; and (5) policies for promoting its sale. Of course, there are many attendant policy considerations, such as those involved in the availability of financing, the effect of the product on the organization, the hiring and training of necessary labor, the purchasing of material, and the acquisition of facilities. For, while a business may have as its primary objective the making of a profit, it does this through exploiting the possibilities of a product.

Included in the area of product selection are policies having to do with expected profits, the way the product fits into the product-line strategy of the company, and the compatibility of the product with the firm's know-how, facilities, material sources, and distribution channels. Even though prospective profitability may be of primary concern to a firm, it cannot overlook these other factors.

Pricing. Another area of policy formulation that requires considerable planning in most enterprises is pricing, including not only determination of base prices but also schedules of discounts and price differentials between products of the company's line. As almost all businesses have departed from conditions of perfect competition with product differentiation and fewness of sellers, pricing policy has become important as a key instrument of sales policy. Moreover, for those businesses producing special goods and services, pricing policy tends to be set less by price competition and more by a combination of costs and what the market will bear. Thus, most defense industries are not forced to meet a competitive price, and many builders of heavy capital goods have leeway in their pricing. However, even in these cases and despite the fact that price leeway exists, the pressure of competition is such that prices even of differentiated products must bear a close relationship. Despite imperfections in competition, there are few companies indeed that do not feel in their pricing-policy formulation the aggressiveness of existing or potential competitors.

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[2] For an excellent study of product policy and the considerations that enter its determination, see Joel Dean, "Product-line Policy," *Journal of Business*, vol. 23, pp. 248–258 (October, 1950). Much of the material of this section is drawn from this article.

Even where a seller may establish the policy of pricing his goods at fully allocated cost, he will find a wide variation of prices that will suit this policy. Costs and cost allocations are seldom so accurate that somewhat less or somewhat more could not be included in the costs. This inability to allocate costs accurately, plus the usefulness of price variations for strategic marketing reasons, has made pricing policies of utmost importance in all businesses except those selling to a purely competitive market where the seller has no influence on price.

Price policy is an area in most businesses that must be continually studied. Changes in technology, new competition, new sales promotion programs of competitors, changes in demand, and shifts in costs are among the many factors that force constant restudy.

Moreover, pricing is often a significant instrument of sales promotion. If it is a firm's policy to appeal to the mass market, it can find in the price structure of its products a means for making customers believe that it is a low-price source of goods and services. But the firm that desires to appeal to the prestige market will use price as a means for enhancing this appeal. Thus, a certain retailer handling high-grade men's clothing has a policy of putting on a yearly sale, but when it does so, the suits are priced at $90.00 or $100.00 and not at $89.85 or $99.95.

Sales promotion. In the sale of their products, firms develop a wide variety of promotional policies. These may have to do, as already noted, with pricing, or they may have to do with advertising, packaging, channels of distribution, grading, sampling, or many other devices and programs.

But sales promotion goes far beyond the more obvious methods. The company's reputation for a good product or fair dealing may be important influences and thereby significant sales-policy considerations. Or the quality of a company's service may be the reason for preferring one company over another. In the oil fields, for example, it is well known that the availability of materials and supplies tends to be more decisive than price, for a rig idled for lack of pipe or some needed tool is very costly.

As a result, those supply houses and equipment manufacturers that have adequate field service and inventories tend to get the business, regardless of differences in price. Likewise, such apparently remote factors as a good market for resale materially affect sales, as is indicated in the passenger automobile business by the fact that the three largest manufacturers gain an edge from the better resale market of their cars.

Distribution channels. Another aspect of sales policy is the problem of distribution channels. In certain industries, such as the drug manufacturing business, distribution channels are fairly clear-cut. In many industries, the practice of utilizing jobbers, wholesalers, and retailers with fixed discounts is so standardized that little question of policy arises, except that of the kind of distributors to select, and where and how to sell them on carrying the firm's products. But in many businesses, the selection of distribution channels presents difficult policy decisions. For example, a small laboratory-equipment manufacturer had the choice of limiting sales efforts to direct customer inquiry, hiring field salesmen, utilizing manufacturers' agents, or seeking established jobber outlets.

One problem in establishing policy on channels of distribution is that a firm may find it rather difficult to make any significant changes. It is not easy to conceive of a very great change in the practices affecting distribution of automobiles, proprietary drug products, or many other items. On the other hand, certain companies have been very successful in revolutionizing distribution channels and methods. Included among these are the chain stores, the supermarkets, and many of the farm cooperatives.

Policy Formulation: Production

Another major area of policy formulation is production. As with sales, there are countless policy questions that must be decided in the typical firm. Only a few examples can be given here.

Buy or make. One of the policy matters that continually faces the management of firms is the question of whether to buy or make a product or a component of a product. Not only the small firm but many of the larger ones have decided to buy a product or a component rather than to tool up its own facilities for doing so. In some cases this decision is made on the basis of the specialized nature of the facilities or know-how required. Many of the larger firms do not, for example, do their own casting, others farm out their forgings, and many contract their screw-machine work. Furthermore, there are many items that go into the typical product that may be purchased. Steel and aluminum shapes, electric motors, wire, vacuum tubes, gears, bearings, and many other items are ordinarily purchased from companies specializing in them.

But the question as to whether to make or buy extends much farther than to such components. Often a company decides to have an entire product or a major portion of a product made by another company. For example, Philco has had its room air conditioners built by the York Corporation since 1938. Radio Corporation of America buys its room air conditioners from Fedders-Quigan Corporation. International Harvester marketed a new type of truck body on its truck chassis and decided to have Fruehauf Trailer build it. Even General Electric, which has followed fairly consistently the policy of making rather than buying, has bought its electric ironers from an outside source. While numerous other examples could be given, it is nonetheless true that, particularly among the larger companies, the policy has been strong to make, rather than to buy, their own products and the major components of them.

What would tend to guide a company in the direction of buying rather than making its product? Some of the obvious answers are its lack of facilities or know-how, or its lack of capital to expand into a new field while rapidly expanding into others. Other reasons include the importance of timing, since a company might not be able to engineer a product, remove the "bugs," and get into production in time to take advantage of a market. Or a company might not wish to make a heavy commitment of capital and labor until it has had ample time to test the market. In addition, especially as businessmen tend to fear the stability of boom conditions, they may prefer not to have their capital so heavily committed. They buy flexibility in planning when they decide to buy rather than to make.

Size of production run. Another typical policy question has to do with the size of the production run. Where a company has an adequate backlog of orders, volume will normally be dictated by the economics of producing at capacity. But where, as is more usually the case, the company must produce on speculation for future sale, the policy question of gaining efficiency through large-volume operation gives rise to the risk of having too large an inventory either to finance or warehouse. Thus, the costs of "tooling up" for a run must be set against the risks of overstocking. At this point, of course, a reliable sales forecast can be the determining factor, although often competitive forces and economics of volume production require a company to take the risk of overstocking in order that their costs and prices be low enough profitably to meet competition.

Production stabilization. Difficult policy decisions also arise in connection with timing production to market demands and yet gaining stabilization of operations. The demands for many products are highly seasonal, and almost every product is subject to some demand variability. Like the question of the economical production run, timing production to demands presents serious policy problems to the manager. Some companies deal with this problem by merely producing to order, laying off and rehiring labor as needed, or maintaining their work force and tools in operation on less profitable items. Other companies assume the risks of changing demands and price levels by producing for inventory. Still other companies attempt to obtain fill-in orders or products to take up the slack of off-season facilities or labor. In the consumer goods market, the large chain mail-order and department stores have often been able to receive price concessions by contracting for off-peak production.

But in service companies, such as transportation businesses, the problem of cyclical demands has a serious effect on costs. An unfilled boxcar or passenger seat is a product so perishable that it cannot be carried in inventory, with the result that operational stability and cost saving cannot be obtained by inventorying product. In such companies, there is usually no choice but to operate at times with idle equipment and unutilized labor and at other times with unfilled or deferred demands. These peaks and valleys have been reduced somewhat by policy decisions in other areas, such as the sales decision to offer reduced family fares by air on the first three days of the week or off-season fares, or to encourage key personnel to take vacations at off-season times.

Inventory. Many of the policies with respect to production tie closely to inventory policy, and planning the economical level of inventories is one of the key decision areas of business. Inventories must be high enough to make products available as needed by the customer and as required by competitive forces. And yet, too high inventories increase the cost of doing business and greatly magnify the risk of loss from price declines or from changes in style, technology, or demand. Inventory size may also be influenced by the economics of production runs and will necessarily be limited by the financial capacity of the company.

While the principles governing inventory policy are fairly clear, the actual policy decisions for a given company at a given time are not so simple. In one business, the time required to procure or make products may be a month, while in another the period may be a year or, as is the case in the airplane business, three to five years. In one business, the customer may be willing to wait for months or more to obtain a product, while in another, if the product is not immediately available, the sale will be lost to a competitor. In one business, the market may be stable in terms both of price and quantity purchased; in another, both the demand and the level of prices may be mercurial. In one business, the inventory may be highly perishable; in another, subject to no deterioration.

The importance of inventory policy in most businesses can hardly be overemphasized. As has been pointed out before, capital is the lifeblood of the firm. If this capital is tied up in slow-moving inventory, it cannot be used for expansion of the business or improving business economy.

Therefore, most managers watch closely inventory size and turnover, for, in addition to risks involved in having resources sunk in unsaleable merchandise or goods subject to price or quality deterioration, inventories require capital, which is ordinarily one of the most strategically limiting factors in the business enterprise.

Vendor and procurement policies. A further important area of policy formulation has to do with the sources of materials for the production of an enterprise. Among the more significant of these policies is that of having few or many sources of supply. By concentrating purchases, a company may obtain better prices, more dependable deliveries, and ability to specify the kind of materials it needs. In fact, in certain businesses, especially those requiring specialized materials, it is important to work closely with vendors. On the other hand, by concentrating purchases in the hands of one or two vendors, the firm assumes risks of nondelivery if the supplier has a strike or a fire, or should fail. The catastrophic fire in 1953 that destroyed the large General Motors plant manufacturing automatic transmissions greatly disrupted not only the production of certain General Motors cars but also those of several independent manufacturers who had relied on this plant.

Vendor-selection policy will then be determined by the application of a number of factors. Important always will be price and quality. But also important is the kind of service the vendor can furnish, including promptness and reliability of delivery, technical assistance in development, willingness to extend suitable credit, and the reasonableness and fairness with which the vendor treats his customer. In addition, as indicated, the degree of risk involved in depending too much upon a few vendors will play a significant part in selection, and many companies establish firm policies of not acquiring more than a certain percentage of any material, if at all possible, from a single source of supply.

Policy Formulation: Financial Policies

The controlling importance of the financial aspects of business enterprise has been recognized at many points in this book. A company's capital, whether furnished by its owners or borrowed, sets the limits to expansion and provides the means for obtaining those assets necessary to make a business firm an operating reality. Whether these assets are in receivables and inventory or in plant and machinery, they are a part of the essential capital that the business must have to continue. As in the case of sales and production, there are many areas of policy formulation that arise from financial problems of the enterprise.

Capital procurement. Policies dealing with capital procurement are those having to do with sources of capital and depend to a very great extent upon the size of the business and the willingness of its owners to draw upon outside capital. The point is often made that capital procurement depends largely upon the legal form of the business. It is said that the individual proprietorship must depend upon its capital resources from the single owner, that partnerships must depend upon the resources of the partners, but that corporations can draw capital generally from the public. To an extent this is true, although there is no *legal* limit to the number of lenders who might help finance a proprietorship or a partnership, or the number of partners who might join together. However, the corporate form, by creating the corporation as a separate entity, grants stockholders limited liability and the corporation immortality.

While the means for wide investor participation in investment are thus furnished and while it is difficult to conceive of the modern large enterprise without the features of limited liability and immortality of the corporation, it does not follow that capital can necessarily be obtained thereby more easily than with other forms. A small business owned by a few persons gains little advantage in financing by use of the corporation. As a matter of fact, it has become customary for banks to require the principal stockholders in small businesses to pledge all their personal assets, along with those of the corporation, as security for a loan. Furthermore, where a few individuals own the major interest in a small corporation, the lure of limited liability has little interest to an investor, since a minor equity ownership in a small business would give him negligible control over his funds and the smallness of the corporation would not offer the possibility of a ready market for his stock.

In the larger corporate enterprise, however, with a record of earnings, a well-managed operation, and an established market for stock, the limited-liability features are clearly advantageous in inducing investment. Moreover, the assets and earnings of the business are likely to be large enough to support heavy borrowing without any resort to the credit of its owners.

In developing policy for the procurement of capital, owners of a business must face and resolve a number of issues. Assuming that a realistic estimate of future capital requirements is available, policy questions arise as to the extent to which equity capital will be solicited from the public or from sources outside the principal owners. This raises questions, particularly for the small enterprise, as to danger in loss of control.

Furthermore, since a large portion of the usual company's funds come from reinvesting profits, a policy question arises as to the extent to which profits should be retained or disbursed. This, in turn, raises numerous questions of dividend policy. The question of borrowing also requires decision. Should the firm's assets be mortgaged or otherwise pledged against loans? If so, upon what basis, with what kind of a lender (bank, private lender, insurance company, government lender, factoring company, or other), for what term, with what provision for repayment, at what interest rate, and with what restrictions on operating and financial practices?

These and other questions bear on the kind of financial structure the company should adopt. It has been customary in American industry for railroads and public utilities to do a large portion of their financing with long-term borrowings, partly because these companies require heavy capital investment in relation to their sales, partly because they have found funds generally easier to obtain through borrowing, partly because of the belief that a certain stability of earnings exists that will support borrowings, and also because top managers have found in low-cost credit a means for pyramiding earnings on stock. On the other hand, industrial firms, generally with a much higher capital turnover and an experience of greater variability of earnings have done far less long-term financing, obtaining their capital through the sales of stock and reinvestment of earnings. Short-term capital needs have been obtained through commercial credit.

For smaller corporate enterprises of all kinds, there is normally little room for decision as to capital structure. Long-term borrowings are usually out of the question, and the owner of the small business is generally limited in his capital expansion to obtaining funds through resources of himself and friends (and this can seldom go far, for even friends investing any sizable amount of equity capital will want control commensurate with their investment), and through such working-capital borrowing as may be obtained through commercial banks or factoring companies.

Utilization of depreciation funds. Perhaps the largest single source of cash for going businesses for the financing of new plant and equipment is the funds held in the business through depreciation reserve accounting. In 1953 the department of economics of the McGraw-Hill Publishing Company estimated that depreciation funds financed approximately 6.8 billion dollars out of 12.1 billion dollars of new plant and equipment in all manufacturing companies.[3] Moreover, according to this source, about 85 per cent of the manufacturing firms expected to continue their policy of spending all their depreciation allowances for new plant and equipment. As might be expected, the extent to which depreciation funds furnish the source of cash for investment varies among industries, accounting for only one-sixth of the expenditures in transport equipment, about one-third to one-half in the basic industries

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[3] "Industry's Plans for Capital Spending: Still on a Big Scale," *Business Week*, Apr. 4, 1953, pp. 112–124.

(steel, chemicals, petroleum, machinery, electrical machinery, and automobiles), and two-thirds in textiles, food, paper, lumber, and rubber.

In any policy formulation having to do with capital sources, the reinvestment of depreciation allowances plays a major role. Occasionally, depreciation reserves pile up more rapidly than the need for funds for expansion, particularly where investments are written off much faster than their actual loss in service life. Policy questions arise as to whether a company wishes to use these funds for expansion or whether they should be earmarked for replacement of obsolete equipment. In fact, the utilization of depreciation funds as a source of cash raises questions that strike at the heart of capital planning.

Owning versus leasing. One important source of capital that has been increasingly employed in recent years is the lease. Businesses of all kinds find they can extend their sources of capital by leasing plant and even machinery and equipment, thereby saving commitment of their scarce capital. Another important aspect of so doing, and one which has often become controlling, is the saving possible under tax laws. Lease costs are deductible for income-tax purposes, so that a firm can afford, particularly with high corporate income-tax rates, to pay high lease costs and still have low net costs. If this same amount of capital were raised by equity sources, the equipment would have to earn much more to justify the expenditure.

During the period of high excess-profits tax, this difference was considerable. If a firm had a choice between leasing or buying a $10,000 capital-equipment item, the economics of so doing might work out as follows for a corporation whose *marginal* earnings were subject to an 82 per cent tax. To earn net 8 per cent per year on a capital investment of $10,000, the facility would have to return annually before taxes about $4,400, or 44 per cent return on investment. But if the equipment were leased even at so high a rate as 30 per cent of cost, or $3,000 per year, the net cost of capital used *after taxes* would be only $540, or less than 5½ per cent of the equipment investment.

Thus, high tax rates have affected the policy of owning versus leasing, as they have affected the entire economics of borrowing versus owning, so that the traditional risks of leasing or borrowing are greatly modified. Even when tax rates on marginal returns approximate 50 per cent, the corporate enterprise must consider taxes as a major factor in any decision to own or lease or in its decision to borrow or invest equity capital. These policy considerations are no longer a simple matter of capital availability, risk, or absolute return on investment but tend to be altered materially by the economics of corporate tax deductibility.

Depreciation rate policy. Another sphere of financial policy formulation lies in the decisions reached as to the rate at which facilities are written off the books of the corporation. To a very great extent, this policy tends to be controlled by the tax laws, since depreciation is a deductible expense and the higher the charge, the lower the taxes. But in this connection, a company is faced with the question of whether to depreciate assets in accordance with their tax allowance, for a company can pay taxes on the basis of one depreciation rate and write off assets on the basis of a higher or lower rate. It may be the part of conservative policy to write off assets faster than permitted for tax purposes, if the tax-permitted rate is too low, since it is the company, rather than the tax collector, that is harmed by an overstatement of earnings. On the other hand, even where the tax authorities allow accelerated depreciation, as has been done for certain defense expenditures, the company may not wish to take advantage of this fast writeoff if it can see financial advantage in deferring earnings to a later year.

Furthermore, there are difficult policy issues with respect to the base against which depreciation rates are applied. In a period of rising prices, a company charging off depreciation on the basis of original costs may actually be overstating earnings by depreciating its assets when the replacement cost may be double or more the original cost at retirement date. There are many companies that wrote pre-World War II assets off at original cost during and after the war, only to find that actually they had charged against earnings less than the real costs involved.

Working capital. Working capital is generally defined as the excess of current assets over current liabilities and is thus that portion of current assets which has been supplied by the permanent investors of the business. Since assets are regarded as "current" when they are expected to be converted into cash in the normal course of the business (usually defined by accountants as within one year) and since liabilities are current if they will be liquidated in the same period, working-capital adequacy becomes in fact the measure of the ability of the business to meet its obligations. Adequate working capital, particularly that portion available in cash, is thus the first requirement for maintaining credit, meeting obligations promptly, and avoiding bankruptcy. It is the ability of the firm to pay its bills when due that assures continuance as a going enterprise, and not the size of the firm's surplus account, as many businesses have come to find out when a lack of liquid assets or cash forced them to the wall. Inventories of unfinished or even of finished goods not readily marketable are an unacceptable substitute for cash for the creditor or the workman whose pay is due.

Working-capital requirements and policies vary as between companies. The electric utility company with regular cash collections needs less than the manufacturer of expensive specialized machines. The company operating on a strictly cash basis will require less working capital than a similar enterprise with predominantly credit sales. The company with the short production cycle will need less working capital than an otherwise similar company with a long production cycle. These and other differences, then, affect seriously working-capital policies of business enterprises.

Among the working-capital problems that a firm faces are the extent to which its current assets should be held in cash or easily marketable securities, the nature and liquidity of receivables and inventories, the nature and immediacy of current liabilities, creditor discounts, and other factors. Of course, of paramount significance is the size and adequacy of working capital and its variability as business operations expand or contract and as collections vary. Working-capital policy understandably has a strong relationship to the firm's policy on credits and collections.

Working-capital policies are also closely related to policies concerned with bank borrowing and the maintenance of a line of credit. The amount of credit line will reflect business variations, and the adequacy of invested working capital will be an important consideration in planning for periods when the firm can "clean up" its bank borrowings. Banks usually like to see the borrower use credit only for cyclical swings in working-capital needs and not as a permanent source of these funds. Working-capital planning is therefore primarily a function of cash planning, and cash planning, as will be seen in Chapter 24, reflects the entire planning program of the company.

Profit disposition. One of the interesting areas of financial policy formulation is that connected with profit disposition. This, in turn, depends much upon policies adopted for the calculation of profits. Some firms, for example, charge off depreciation at rates much higher than the actual loss in value of the property depreciated, thereby reducing profits and retaining funds in the business that might be paid out in income taxes or in dividends. Other firms understate or overstate profits by charging capitalizable costs to current expenses. If a firm conservatively evaluates inventories, this practice may lead to understating profits. Consequently, policy questions arise as to the actual calculation of profits.

But, regardless of how profits are determined, every firm has policy questions in connection with the disposition of profits. In the closely held company, this may be no problem, since the requirements of expansion and the desire to reinvest earnings may make the policy choice clearly one of maintaining profits in the business. But in the typical large enterprise, whose stock is widely held, difficult questions may arise. If the company wishes to develop an investment reputation for its stock, it may favor regular dividend payments. Even in these cases, questions occur as to how high dividends should be or what portion of earnings should be distributed in dividends. Or a company may prefer to rely on growth to give its stock attractiveness in the market. In this case, the company will prefer a policy of reinvestment of profits and the distribution of little or no earnings. Clearly, the desirability of one policy or another will depend upon a number of factors, including (1) the desires of the stockholder group; (2) the company's plan to raise additional funds, if any, through further stock flotations; (3) other sources available to the company for obtaining capital; (4) the urgency of the need for additional capital in the company; and (5) the profits possible from reinvesting the company's earnings.

Policy Formulation: Personnel and Public Relations

In its dealings with people, the business must plan carefully. Within the enterprise, the managers of a company must assure themselves that they have a loyal, intelligent (at least in terms of the company's objectives), competent, efficient, and enthusiastic group of subordinate managers and employees. But in addition, since the business firm must live and prosper within a community and since what the community thinks of a firm's activities may greatly affect its success, the business manager must plan well his firm's actions in the area of public relations.

Personnel selection and training. At the base of any policies with regard to personnel are those dealing with selection and training. In fact, as has been noted above in Chapters 16 and 17, these are essential aspects of the managerial function of staffing. There are a number of policy questions that must be determined. In filling vacancies at the lowest rank, how much testing, interviewing, and other measurement should be given to the prospective employee? Or should these selection procedures be rather casual, with a policy of ruthlessly weeding out the unfit after a short probationary period? How much experience or training should be required of an applicant, or should the company plan to do its own training? For the selection of personnel to fill positions of higher rank, should the firm adopt an ironclad policy of promotion from within or one of open competition from within and outside? What shall be the minimum educational requirements? What should be the policy on hiring relatives of present employees? Should religious, geographical, marital, or other factors be given any weight in selection or promotion of employees? Should the company plan to engage in extensive training, and, if so, should it be undertaken through formal classroom procedures, conferences, committee operations, on-the-job coaching, or rotation through jobs? These and many other policy questions arise in determining a program of selection and training.

Compensation. Another of the areas of personnel policy that give rise to serious questions is that involving compensation, whether in terms of wages, profit sharing, bonuses, or other types of financial remuneration.

These questions not only arise in connection with the absolute amount of the compensation paid to an individual, but also with respect to the relation of this amount to persons on the same general level and the relation of this compensation to pay scales vertically through superiors and subordinates. Other questions arise as to the method of arriving at the compensation and the method of paying it.

Most companies adopt the policy of paying wages and salaries equal to that paid by other companies seeking the same kind of skill in the same community—the policy, in other words, of paying competitive wages and salaries. This policy is not hard to understand. In the first place, such payments, being competitive, will probably attract the necessary personnel. In the second place, by not paying a higher compensation, the company may reasonably expect its costs to remain competitive. Furthermore, as labor organizations have gained power and contracts are concluded with large national unions, wage scales among the nonmanagerial groups of employees have tended toward uniformity in given industries and localities. However, many companies purposely adopt other policies, especially where union or industry pressures permit them to do so. Some companies have adopted high pay policies on the basis that they attract thereby the more competent workers, save costs by reducing turnover and increasing employee morale and efficiency, or thwart the growth of union organization.

Wage and salary levels within the firm also give rise to policy problems. Both managers and workers react unfavorably if they find that others in another part of the company receive higher pay for work regarded as similar. Particularly with respect to managers, some top-management members often delude themselves into believing that they can avoid the problem of comparable compensation at the same levels through the use of confidential payrolls and other devices to keep differences a secret. Seldom, however, in practice do payrolls remain confidential, and it is rather unusual for managers in a company not to find out what their colleagues doing similar jobs receive. The best solution, of course, is to develop a job-evaluation program, which will rate jobs fairly and openly on the basis of importance, degree of training and experience required, and nature of duties and working conditions involved. While no policy or practice can avoid all criticism of pay differentials,. a policy of open fairness based upon objective evaluation will do much to solve the problem.

Another area of compensation policy has to do with the practice of setting compensation rates for superiors and subordinates. Often at the lower levels of the organization structure the pay differentials are too low, and occasionally a general foreman will receive too little more than his foreman, or his foremen too little more than their charges, to give weight to the varying degree of responsibility and training required or to the necessities of prestige. At the higher levels of organization, on the other hand, the differences may be too great. The existence of differences is hardly a question of policy. It does, however, raise one of the serious problems of the system of pay in American industry and government. Since pay levels tend to rise rapidly with increasing managerial responsibility, particularly at the upper levels of organization, there is a strong tendency for the principal avenue of obtaining high pay to be that of being in a management position over many people. This may, then, lead to empire building and the needless expansion of subordinates; or it may force highly qualified nonmanagerial personnel, such as top research scientists, to take managerial positions which are undesirable to them in order to increase their pay. Some companies have recognized these problems and, through careful job evaluation, have made factors other than the number of subordinates the criteria for pegging salary rates.

Particularly with the rise in personal income-tax rates in recent years, companies have endeavored to find ways and means of planning compensation, especially of managerial personnel, so that pay can be obtained in other ways than pure salary. These devices and their influences on motivation have already been discussed in Chapter 15. At this point it is only necessary to point out that they raise policy, as well as procedural, questions. Among the former are such questions as who should receive the additional compensation and upon what basis, whether the compensation should be in the form of stock, cash, or options, and the extent and method whereby service, contribution to profits of the firm, and similar factors should be weighted.

Employee benefits and morale development. Typical personnel planning requires a large number of policy determinations in the field of employee benefits and other devices for improving employee morale. Every firm must answer policy questions on vacations, sick leaves, leaves of absence, retirement pay, company cafeterias, and working conditions. In addition, most companies must face policy questions of the extent and nature of recreational and social activities it should furnish, the kinds of insurance it should offer and the portion the employee should pay for, the medical services offered, and the nature of employee newspapers or magazines. These questions require not only basic policy determinations of the extent to which the company should develop and support a personnel program but also more detailed policy decisions about the nature of each portion of the program. Since many employees dislike the paternalistic approach in some personnel programs, especially when they believe that these costs replace wages to which they might otherwise be entitled, the intelligent top managment of a company can hardly delegate to a personnel department or a shop superintendent complete authority over the formulation of an employee benefit program. These programs, striking as they do at the heart of the managerial job, should be the subject of considered policy guidance by the top management of an enterprise.

Union relations. Earlier in the history of American business, managers were subject to the serious problem of making a decision whether to bargain individually with their employees or to bargain collectively. Since the rise of national unionism under the protection of the National Labor Relations Act of 1935, this problem is no longer of importance. But there still exist many policy problems in union relations. One of the basic questions has to do with the attitude of the company toward its labor organizations. In most cases managers have decided that a cooperative attitude saves trouble and money. In some cases, management has all but abdicated its role as employee leaders to union organizations, relying on them to serve as the primary channel of communication between the workers and the managers. But in the major number of instances of enterprises whose employees are organized, the company has insisted, as a matter of policy and practice, on its right to continue an effective line of communication with employees.

Another area of policy formulation lies in the handling of grievances. Some companies have adopted the policy of allowing almost any grievance to go through all established channels to an impartial arbitrator set up by the company-union contract. In these cases, the management personnel through whose hands the grievances go do little more than hear the grievances and collect records. In other companies, however, there has been a fairly effective policy of encouraging managers at the very lowest levels to settle grievances, so that the machinery of grievance handling is utilized only by the truly exceptional case. Of course, the adoption of a company's policy in handling grievances will be affected by a union's policy. Some unions seem to prefer pressing grievances to their utmost, while others appear to follow the policy of obtaining settlement at the lowest organizational level possible.

Public relations. In its broadest sense, public relations includes relations with the government, the community, and even with the customer. However, customer relations are usually regarded as sales matters, and the policies applicable to sales should cover this area. But in the area of a firm's relations with the public generally and with government agencies, American business was, until World War II, relatively ineffective in presenting its case. After being placed on the defensive by the New Deal, business managers have come back strongly in the postwar period to inform and influence the community in which they operate.

In fact, public relations policy formulation in the typical business enterprise has become one of the major preoccupations of the chief executive. From a position of secrecy and reticence, most companies have modified their policy to one of aggressively informing the public. This policy of making available more information has been effected by another policy of centralizing control, usually in the office of a top public relations executive, of news releases, speeches, and participation in outside functions by managerial personnel. This control has normally been designed to obtain a unified public relations program to ensure that the company makes the kind of impression it desires.

In general, the public relations policies of recent years have had certain rather definite manifestations. More complete and accurate information of company financial and other activities has been published. Businesses have taken a leading role in supporting local and national charities, educational organizations, and other causes. Management personnel have been encouraged to participate in community affairs and even to take governmental posts or run for political office. In more and more ways, business management has properly come to regard its job as more than offering a good product or service to the market at a fair price and at a profit but also one of making the public generally understand the importance of business and management to the community.

Strategy and Policy

A discussion of the area of policy formulation would be misleading if the implications of strategy were not considered. Policies are not formulated in a vacuum and are not often made unilaterally by the manager undertaking the planning. In other words, plans are undertaken and policies formulated with the realization that they must be adjusted in accordance with the reactions of competitors, customers, suppliers, employees, subordinate managers, and others inside and outside the enterprise. It is this shift of policy to meet a shift in plan or tactics by others, a change that cannot be anticipated accurately in a manager's planning, which may be referred to as strategy. This term, long used in military policy formulation, is important in understanding business planning. The policy of a business firm may be clear, and its plans well developed, but strategy requires the shading of plans or policies to meet the changes of plans and policies of others.

In poker or chess, as in war or business, a carefully formulated plan of the player may be upset by the actions or strategy of an opponent.[4] The skillful player, therefore, shifts his plans in accordance with the moves and apparent plans of opponents. Of course, as in all such cases, the cards or resources held may be so important as to outweigh good strategy and planning. To borrow another term from military planning, it may be well to recognize that "tactics"—or the detailed steps by which a strategy is effected—have an application to business planning. After a situation has been gauged and the policy shaded to take this situation into account, a program of detailed action is required to implement the strategy. Indeed, in a very real sense, all implementation of policies, which may include further policies and certainly detailed procedures, methods, or programs, is encompassed in business tactics.

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[4] The connection between strategy in games and that in business is ably, although somewhat abstractly, described in J. von Neumann and O. Morgenstern, *The Theory of Games and Economic Behavior* (Princeton, N. J.: Princeton University Press, 1944). For a more popular treatment of this subject, see J. McDonald, *Strategy in Poker, Business and War* (New York: W. W. Norton & Company, Inc., 1950).

Many examples of business strategies could be given.[5] A company may put out a product that it would otherwise not produce and sell, for the purpose of discouraging a competitor. A finance vice-president may begin to make discreet but carefully publicized inquiries for loans from another bank when his bank shows some tendency to be too severe on terms. A manager may adopt the strategy of voluntarily granting pay increases to his nonunion white-collar workers ahead of any union- negotiated increases for the other employees. A purchasing agent might unduly encourage a vendor in order to obtain more aggressive attention and pricing from a competitor. A top manager might deliberately avoid having anything to do with union negotiations until agreement is almost reached and then use his power and standing to close the deal by a last-minute intervention. Another top manager might purposely delay making a needed reorganization of his upper-executive levels until the situation has become so serious that his subordinates will accept any course other than the existing situation. A manager who opposes a course of action desired by his superiors may be converted by being put in charge of the activity or being appointed as chairman of a committee to come forth with recommendations.

Such examples of strategic shading of policies to gain objectives illustrate the flexible nature of policy formulation and execution. A basic policy or objective may be clear, as may be the major derivative policies. But policies must ever be made with a view to their impact on others. The reactions of persons who will be affected by the policies must become a part of the policy formulation itself. By the interpretation of policy in the light of a given situation, whether known and understood or forecast to occur, considerations of strategy become the means by which policies are effectuated. Since business must deal with human beings and since people themselves react in ways that cannot always be accurately foreseen, determinations of strategy, along with the maintenance of flexibility in plans, become essential to effective planning.

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[5] An interesting classification of business strategies has been devised by Professor L. C. Sorrell of the University of Chicago. For a discussion of these, see W. H. Newman, *Administrative Action* (New York: Prentice-Hall, Inc., 1951), pp. 110–118. Some of these strategies, which businessmen will easily recognize, are "strike while the iron is hot," "time is a great healer," "bore from within," "in union there is strength," "divide and rule," "draw a red herring across the trail," "capitalize on apparent defeat," "pass the buck," and "conserve your gunpowder."

SELECTED REFERENCES

Barnard, C. I., *The Functions of the Executive*, Chaps. 13–14. Cambridge, Mass.: Harvard University Press, 1938.

Dale, E., "New Perspectives in Managerial Decision-making," *Journal of Business*, vol. 26, no. 1, pp. 1–9 (January, 1953).

——— *Planning and Developing the Company Organization Structure*, Research Report 20. New York: American Management Association, 1952.

Dean, J., "Product Line Policy," *Journal of Business*, vol. 23, no. 4, pp. 248–258 (October, 1950).

Goetz, B. E., *Management Planning and Control*, Chaps. 6, 9. New York: McGraw-Hill Book Company, Inc., 1949.

Hempel, E. H., *Top-management Planning*, Chaps. 5–16. New York: Harper & Brothers, 1945.

Jamison, C. L., *Business Policy*, Chaps. 18–27. New York: Prentice-Hall, Inc., 1953.

MacNiece, E. H., *Production Forecasting, Planning and Control*. New York: John Wiley & Sons, Inc., 1951.

McDonald, J. D., *Strategy in Poker, Business and War*. New York: W. W. Norton & Company, Inc., 1950.

Newman, W. H., *Administrative Action*, Chap. 3. New York: Prentice-Hall, Inc., 1951.

——— *Business Policy and Management*, 2d ed. Cincinnati: South-Western Publishing Company, 1949.

Petersen, E., and E. G. Plowman, *Business Organization and Management*, rev. ed., Chap. 12. Homewood, Ill.: Richard D. Irwin, Inc., 1948.

Rowland, F. H., *Business Planning and Control*, Chaps. 3–8. New York: Harper & Brothers, 1947.

von Neumann, J., and O. Morgenstern, *Theory of Games and Economic Behavior*. Princeton, N. J.: Princeton University Press, 1944.

23

chapter 20

SELECTION FROM ALTERNATIVES

Planning has been defined as the selection from among alternatives of policies, procedures, and programs. As has been made clear from earlier chapters, the selection of alternatives requires the establishment of planning premises, since it must be against a background of existing and forecast facts, policies, and other plans that any course of action should be considered. The world of business planning is a complex of plans already made, premises internal to the firm, and premises external to the firm. The adoption of a single course of action can seldom be judged alone, as it must be geared with other plans of the firm or these plans changed to be consistent with the new plan considered.

Developing Alternatives

One of the key steps in planning is the development of alternative courses of action. If there are no alternatives, the scope of planning becomes exceedingly narrow, limited to working out the machinery of the plan so that it may be executed efficiently and effectively. For example, if a firm has no alternative but to cut the price of its product by 50 per cent, this kind of Hobson's choice means that there can be little or no problem of planning price policy.

However, it is a rare thing that alternatives cannot be developed for any course of action. For example, the firm faced with the necessity of a price cut because of the competitive pressures might consider dropping the product from its line altogether, withholding it from the market, or, through advertising, special packaging, and other product-differentiation devices, developing enough special features so as to sell the product at a higher price than competitive items.

One of the authors was with a firm that desperately needed certain items of capital equipment to build up its production to a level where reduced costs and expanded markets would turn losses into profits. Yet a record of losses had so depleted the company's capital and credit that the capital equipment could apparently not be financed. The single available course of action seemed to be to do nothing. But to do nothing was to assure bankruptcy. Therefore, the officers of the company made it their first duty to seek out alternatives. One manufacturer was found who held the needed items of capital equipment, which he could not sell and which had been financed by some banks. Inquiry of the manufacturer's banks disclosed that they would be willing to let the manufacturer sell the equipment without down payment and accept two-name paper instead of the single-name notes then held. A competitor of the firm needing the equipment had new equipment on order and, with no readily available market for the older machines, offered to sell the latter on a no-down-payment basis. Hence in an apparently hopeless situation two alternatives were found.

The ability to develop alternatives is often as important to planning success as making a right decision among alternatives. Unless a manager can reach his decision after consideration of the most desirable courses of action, he cannot always make the best decisions. Ingenuity, research, and perspicacity are required to make sure that the best alternatives are considered before a course of action is selected.

The development of available alternatives, if at all thorough, will in most cases unearth so many choices that the manager cannot possibly consider them all in arriving at a decision. Even with the latest mathematical techniques and electronic computers, the analysis of alternatives and their comparison with one another is an almost impossible task unless there has been some preliminary selection from among them. Usually, this is not as difficult as may seem at first. The experienced analyst tends to develop a sharp sense of discrimination between a myriad of alternatives and is ordinarily able to exclude the unsuitable or those that do not offer fruitful possibilities.

The Principle of the Strategic Factor

In all areas of decision making, the most helpful approach is to recognize that there are certain facts or other considerations that have the most bearing on the results the decision may yield. These are the strategic factors whose recognition and weighing constitute the short cut to wise decision making.

The strategic factor is often referred to as the "limiting factor" in the physical and biological sciences. There may be in any one situation more than one strategic, or limiting, factor, but in any case it is that factor which affects decisively the results to be expected from a course of action.

Chester I. Barnard, in his classic *The Functions of the Executive*, recognizes the importance of this principle when he points out: [1]

> The analysis required for decision is in effect a search for the "strategic factors." . . . The theory of the strategic factor is necessary to an apprecia-

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[1] C. I. Barnard, *The Functions of the Executive* (Cambridge, Mass.: Harvard University Press, 1938), pp. 202–203. Note that Barnard states that he has borrowed the term "strategic factor" from John R. Commons.

tion of the process of decision, and therefore to the understanding of organization and the executive functions as well as, perhaps, individual purposive conduct. As generally as I can state it, this theory is as follows:

> If we take any system, or set of conditions, or conglomeration of circumstances existing at a given time, we recognize that it consists of elements, or parts, or factors, which together make up the whole system, set of conditions, or circumstances. Now if we approach this system or set of circumstances with a view to the accomplishment of a purpose (and only when we so approach it), the elements or parts become distinguished into two classes: those which if absent or changed would accomplish the desired purpose, provided the others remain unchanged; and these others. The first kind are called limiting factors, the second, complementary factors.

Many examples of the meaning of the principle of the strategic factor can be given. In the case of an automobile out of gasoline but otherwise in good condition, the strategic factor is, of course, fuel. The strategic factor in a house-lighting operation may be a fuse. If a machine fails to operate for lack of a screw, the screw may be referred to as the strategic factor.

In problems of business planning, the discovery of the strategic factor or factors may not be as easy as in the case of machine or equipment operation, since economic factors are often obscure and people and their reactions are involved. But the principle is the same. For example, if a company is considering a profit-sharing program, the strategic factors may be tax deductibility and the attitude of employees toward the plan selected. In deciding whether to expand its operations, one company might find its strategic factor to be availability of capital; another company, the diseconomies of size; still another, the attitude of the government antitrust authorities toward too great size. In deciding whether to reorganize a subsidiary, the strategic factor might be the attitude of a key executive or two, the desirability of organizing to train promotable managerial manpower, or the location of plants. In planning a price rise, the limiting factor might be the expected action of competitors, the reaction of customers, long-term commitments already made, or some other controlling consideration.

The search for, and recognition of, the strategic factor in business planning is normally a never-ending process. For one program at one time, a certain factor or factors may be strategic to the decision. But, at a later time and for a similar decision, the strategic factor might be something relatively unimportant in the earlier planning. Indeed, the strategic factors may shift in very short periods of time. Thus, a company might be able to solve the problem of acquisition of new equipment by solving the strategic factor of capital availability, only to find that the strategic factor has become delivery of the equipment or, later, the training of operatives.

Discovery of the strategic factor lies at the basis of selection from alternatives and hence of planning. The strategic factor, too, is ever changing, and its discovery in business (and other) planning requires constant and thorough analysis. The analysis will in itself require some recognition of the strategic factor in order to channel available research time and resources into the most fruitful avenues. It is ordinarily not possible thoroughly to explore every problem and the solution of every strategic factor. In this case, the business manager must necessarily exercise judgment in determining where and how investigative resources can best be used.

Approaches to Selection from Alternatives

In attempting to select from among alternatives, several basic approaches are open to the manager. Among these are experience, experimentation, and study and analysis of proposals.

Experience. If the manager has been through a planning program in the past similar to that being considered, the success or failure of past experience tends to give him a guide for future action. This reliance on experience probably plays a larger part than it deserves in business decision making. The manager who has reached the position he occupies naturally believes, often without realizing he is doing so, that the things he did and the mistakes he made furnish an almost infallible guide to the future. This attitude is likely to be the more pronounced, the higher in an organization a manager has risen.

To some extent, the attitude that experience is the best teacher is justifiable. The very fact that the manager has reached his position appears to justify the decisions he has made. Moreover, there can hardly be any doubt that the seasoning process of making decisions, seeing programs succeed or fail, and the soul-searching that goes on in the normal successful manager's mind do combine to make for a degree of business judgment (at times bordering on the intuitive) that can hardly be overlooked. If a program of a certain kind succeeded in the past *and* if the same basic factors are present in the current problem, there is every reason to believe that history will repeat itself. If mistakes are made in the past and if they have been recognized as such and their causes analyzed, the same kind of mistake is not likely to be made by the same manager again. There are many managers, however, who have not profited by their errors in past situations and who seem never to gain the seasoned judgment so many modern business problems require.

There is a danger in relying on one's own past experience as a good guide for future action. In the first place, it is an unusual human being who recognizes the real reasons for his mistakes or failures. In the second place, and more importantly, new problems may be so unlike the past that the application of the lessons of experience may be entirely unsuitable. What successor to a retired manager, while gaining guidance from his predecessor's experience, has not found that this experience is not applicable to his own situation? Accepting too many lessons from experience is often too easy a mistake. The general manager of a division or the president of a company, for example, is likely too easily to believe that the path he trod is the right one. If it was once—and it obviously was if judged by the success obtained—he reasons with some force that it should be again. The difficulty is, of course, that, while the past may be prologue to the future, the planner must be careful to utilize it only where it is truly applicable.

On the other hand, if experience is carefully analyzed, rather than blindly followed, it can be extremely useful as a basis for decision making. A successful program, a well-managed company, a profitable product promotion, or any other business decision that turns out well may tend to be used as an example by another business. It cannot be denied that one manager can learn much from the experience of another, whether in the same company or in another company. Just as no scientist hesitates to build upon the research of others and would be foolish indeed to duplicate it, one business manager does well to lean on the experience of others.

To make this experience available to business managers is an important task. Many trade associations, government agencies, and luncheon and other social clubs act as vehicles for this purpose. The lessons of business history, as told by scholars and business reporters, are valuable grist for the manager's planning mill. And even in the field of management itself, a growing service to business managers, who can and do learn much by comparing notes, has been performed by the American Management Association, the Society for Advancement of Management, and many local groups.

But as valuable as knowledge and analysis of the experience of other managers are, the careful planner must watch that these lessons from external experience, like those from his own experience, are accurately employed. Some small companies have tried, for example, to ape the organizational policies and procedures of the General Motors Corporation, only to find that these, while eminently successful for that large firm, were too costly for a company much smaller in size.

Experimentation. One of the obvious ways to decide upon alternatives is to try the various courses of action and see what happens. This technique of experimentation is often utilized in fields of scientific inquiry. It is frequently argued that it should be employed more often in business and that the only way a business manager can make sure his plan is right, especially in view of the number of intangible factors involved, is to try the various alternatives and see by actual experience which is the best.

However, as Newman has pointed out, "the experimental technique . . . should be utilized as a last resort after other planning techniques have been tried." [2] It is clearly the most expensive of all techniques. This is especially true in the case of business problems where heavy expenditures in capital and personnel are often necessary to try a program and where, in many instances, the firm cannot afford to prosecute vigorously more than one alternative or to retrace its steps. Moreover, there may often be some doubt, after an experiment has been tried, as to what it proved, since the future may not duplicate the past.

On the other hand, there may be many business plans in which the best alternative course of action cannot be ascertained without experiment. Even the most accurate reflections of experience or the most careful research may not be enough to make the manager sure of the correctness of his decision. This situation is nowhere better illustrated than in the planning of a new airplane. The manufacturer may assiduously draw from his own experience and that of other plane manufacturers and of plane users. He may have his engineers and economists make extensive studies of stresses, vibrations, fuel consumption, speed, space allocations, and other factors. But experience has proved that all these studies do not give every answer needed to be assured of the flying characteristics and economics (although economic characteristics lend themselves to better forecast through research) of a successful plane. Therefore, some element of experimentation is almost always involved in the process of selecting from alternatives. Ordinarily, a prototype airplane is constructed and tested, and on the basis of these tests production airplanes are finally designed and made. Even before the prototypes are constructed, numerous experimental tests of fabricated subassemblies are made and many three-dimensional mockups are constructed at great cost to make sure that space dimensions are accurate.

Experimentation is used in other ways. A firm may decide to test a new product in a certain market before expanding its sale to a nationwide market. Organizational techniques are often tried in a branch office or plant to see how they work before they are applied over an entire company. An advertising program may be tested in a limited area before being employed more widely. A candidate for a management job may be tested in the job by being assigned the place of the incumbent during the latter's vacation.

Study and analysis of proposals. The most generally used approach to the selection of alternatives when major decisions are involved, and certainly one of the most effective techniques, is research. While the lessons of experience may be drawn upon in analyzing alternatives and while experimentation may be undertaken to test hypotheses, the research approach has many advantages for weighing alternative courses of action.

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[2] W. H. Newman, *Business Policies and Management* (2d ed.; Cincinnati: South-Western Publishing Company, 1949), p. 601.

In the first place, careful study of a planning problem requires that it be broken into its component parts and the various tangible and intangible factors bearing on the problem studied. Research thus tends to focus attention on the entire problem and its parts and, in so doing, to bring to the fore the strategic factors of the various alternatives and of the major components of each alternative. The research approach thus applies the scientific method to planning.

In the second place, study and analysis are likely to be far cheaper than experimentation. Hours of analytical time and reams of paper are usually far less costly than trying the various alternatives in practice. In the example of building airplanes mentioned above, if careful research did not precede the building and testing of prototype subassemblies and the final assembly, one can imagine the failure of planning that would result.

Even where many facets of a business problem appear not to lend themselves to research techniques, the benefits of thorough analysis may be considerable. In most problems of analyzing alternatives, the researcher is faced with intangibles. These factors cannot be stated in terms of numerical units. They may include the attitude of employees or customers, the appeal of prestige, public acclaim for ethical behavior, or the attitude of a community toward a certain kind of business. While it may be difficult or impossible to come to any very definite conclusions about these intangible factors through research, careful analysis can high-light them and make the study of alternatives clearer.

For example, careful research might disclose that a certain airplane design is the safest and most economical an airline could select, but that another design, while equally safe, is less economical. However, a question is raised as to whether the less economical design might have prestige or traffic advantages which would not be capable of accurate measurement but which might, in the judgment of the top managers, offset the expected loss in economy. It can hardly be said that research would be useless here, simply because it could not accurately analyze important intangibles. What it did was to bring these intangible factors into sharper relief. Even though research cannot be expected to eliminate areas of uncertainty in business planning, therefore, it can do much to mark out and emphasize the intangibles that must be decided on the basis of business judgment. At the same time, the ardent analyst must realize his limitations and be prepared to yield to business judgment to a greater or lesser degree.

The extensive use of research in business planning hardly needs elaboration. Active study of business production methods has been undertaken by most firms as a part of the scientific management era introduced by Frederick W. Taylor at the close of the nineteenth century. The economist has contributed much to the analysis of prices, wages, and interest as these apply to the firm, at least since the time of Alfred Marshall in the latter nineteenth century and the refinements by Joan Robinson, Edward Chamberlin, and others in the 1930s. Increasing attention has been also given to market research, by which consumers' demands have been studied through sampling and statistical techniques. In recent years, the techniques of advanced mathematics and probability theory are being applied to business problems under the name of "operations research," to be discussed presently.

As was indicated earlier, the principle of the strategic factor must be applied not only in the selection and evaluation of alternatives but also in the amount of effort expended in deciding upon a plan. This is nowhere more true than in the case of the research technique. Not every business problem can stand the cost or delay of careful analysis and weighing of alternatives. If a president or his board of directors, for reasons of their own, have determined that a course of action must be decided upon by a certain date, the most avid researcher must tailor his research to fit the available time. Moreover, there are many business problems that do not justify the cost of much research or experimentation, since the results of selecting the wrong course of action may not be serious or costly.

The Process of Evaluation

Once available alternatives have been reduced to those regarded as most suitable, the next step in the planning process is to evaluate these alternatives and select the one that offers the best probability of contributing to the firm's objectives within the limits of the planning premises. This is the point of ultimate decision making in the planning process, although decisions were also made in the other steps of planning. The establishment of, and agreement upon, planning premises have required decisions, since the future cannot be known exactly and selections are necessary. Moreover, decisions have been necessary in the preliminary selection of the most promising alternatives. Furthermore, in his approach to the selection of alternatives, the manager is forced to make a decision as to how much his evaluation will be based upon experience, how much on experimentation, and how much on research. But after all these steps have been taken, there still remains the matter of deciding which among the available alternatives will best serve the aims of the firm.

Tangible and intangible factors in evaluation. In most business planning problems, there are certain factors that can be assessed in terms of dollars, man-hours, machine-hours, units of output, rates of return on investment, or some other unit that can be given a quantitative value. These may be regarded as the tangible factors, even though, as is often the case, they may be estimates, with a possible wide margin of error. As was indicated above, there are other factors that can hardly be so quantified. However, both the tangible and the intangible factors must be weighed by the manager in deciding upon a course of action.

Comparison of tangible factors. In most business planning problems the course of action considered involves influence on profits, whether through effects on costs or revenues. In many cases, such as the decision to make an investment in plant, the standard applicable may be the return on investment, rather than the maximum profits obtainable. Thus, while more *total* profits might be obtained by making a certain investment, the analysis might show that the profits as a percentage yield on investment would be more with a lesser investment. Even in this case, the standard would almost surely be maximization of enterprise profits, since use of the return-on-investment standard implies that larger enterprise profits can be obtained by use of the firm's capital in other programs than the one under consideration, or in the decision to limit the total investment in the business.

The determination of maximum profits may depend upon comparison of various types of factors. Standards expressed in such physical terms as man-hours or units of output may be as revealing as standards expressed in dollars and cents. For example, in determining a production plan for a factory, the loading of machines and the utilization of manpower may be the strategic standards against which to measure the most desirable scheduling program. Yet, as can be readily understood, they become so by virtue of their relationship to maximizing profits.

Wherever quantitative measurement can be given to the variables in a group of promising alternatives and where intangible factors do not unduly influence a course of action, the selection of a plan on the basis of tangible factors can be easy, in the sense of arriving at a mathematically demonstrable result. In certain major planning, it is customary to project alternative income statements and balance sheets reflecting the various alternatives. These can show clearly which available alternative is best for the firm. Even where the plan is for a less important element of the business operation and where the effect on the total enterprise is not felt, a comparison of expenses and revenues from the various alternatives can show clearly which course is most desirable.

However, there is often the danger that analysts making these comparisons will forget that approximations, estimates, and forecasts usually lie at the base of their computations. It is relatively rare in business planning, since the analysis must be made for some future period, that the quantitative values given to the variables in a problem can be exact and reliable. Assumptions and estimates are almost invariably necessary, and the analyst, in interpreting results, must be aware of the margins of error on which many computations are based. A detailed study may include tabular presentations of quantitative data, which will seem to the unwary to be more accurate than they really are. Judgment of the margin of error existing in the basic data and the effect of it on final conclusions is an important aspect of any evaluation process. One of the writers recalls a case where a planning program of a company was carefully analyzed by investment bankers to determine its validity, while certain underlying assumptions, which, if incorrect by less than 10 per cent, could have diametrically changed the results of the entire program, were never questioned.

Comparison of intangible factors. The evaluation of intangible factors in a business problem is even more difficult. How does one measure the possibilities of good labor relations in one plant location against the attitudes of the state taxing or corporation authorities in another? How is it possible to give quantitative weight to the advantages of a reputation for high quality against a reputation for sharp competition or low prices? What measurement can be made of the advantages of offering customers a high-grade field service against the expense of so doing?

The typical planning problem, too, is complicated by the existence of elements of sheer uncertainty. Some of these factors are those which are known to exist but whose importance to future activities can be little more than guessed. Other uncertain factors include those which are not even recognized at the time a decision is made but which are disclosed only with the passage of time. Thus, the possibility of a strike in the plant of a supplier is a factor that should be considered by a business planner, but in most instances he has no very reliable basis upon which to weigh it. Or he may know that there is a possibility a new invention will make obsolete his most profitable product, but he will have little way to estimate when this may happen. Or the same manager may find years later that an event he had never considered, or could not reasonably have considered, has affected the success of his plans. The Korean conflict, which opened with little warning in 1950, changed the fortunes of many businesses, making some bad decisions look good and some good decisions look poor.

In evaluating the intangible factors in a planning problem, the analyst or the business manager must first recognize them. His next step is to determine whether there is any way a reasonable quantitative measurement can be given to them. If this cannot be done, he should then find out what he can about them, perhaps rate them in terms of their importance, compare their probable influence against the results disclosed from evaluation of the tangible factors, and then come to a decision. This decision may give predominant weight to a single intangible.

Such a procedure is, in effect, deciding upon the weight of the total evidence. While so doing involves the use of personal judgments, and these are not infallible, few business decisions can be so accurately quantified that judgment is unnecessary. Business decisions would be easy if all variables could be given definite measurement, for all that would be needed for intelligent action would be a mathematician and a computing machine. Planning and decision making in practice are seldom so simple. It is not without some justification that the definition of a successful businessman has been cynically described as a person who guesses right.

Final selection from alternatives. Depending, of course, upon the importance of a decision and the time available to make it, the final selection of a course of action from among alternatives is necessarily a matter of weighing the expected results against the objectives sought. The results sought will be best in terms of the enterprise's objectives, for often a plan that might yield optimum results for a department or a division does not do so for an entire firm.

The comparison of one alternative with another may utilize the techniques of marginal analysis. As was suggested in Chapter 20, the marginal approach emphasizes additional quantities and not averages. Thus, where the objective is to maximize profits, this goal will be reached when the *additional* revenues and the *additional* costs are equal. At any other point, either more additional revenue could be obtained at less additional cost, or the additional revenue obtained will be less than the additional costs incurred; in either case, profits are not maximized.

The marginal technique can be used in comparing actions other than pure costs and revenues. For example, to find the optimum output of a machine, one could vary inputs against outputs until the additional input equals the output. This would then be the point of maximum efficiency for the machine. Or the number of subordinates reporting to a manager might conceivably be increased to the point where the savings in costs, better communications, morale and other factors equal the losses in effectiveness of control, direction, and similar factors.

Perhaps the real significance of the marginal approach to evaluation is that it accentuates the variables in a situation and de-emphasizes averages and constants. It is a useful technique, along with recognition of strategic variables, whereby the best solution to a problem can be reached. If the objective is maximum profits, the marginal approach will yield them. If the objective is stability or durability, the marginal analysis applied in the light of this goal will yield the optimum results.

OPERATIONS RESEARCH AND PLANNING

One of the newer variations of the research approach to business problems has been referred to as "operations research." Because of the nature of this technique, its current popularity, the curiosity concerning it, and its possibilities for future business planning, a brief explanation of it is made at this point.[3]

To a very great extent, operations research is a product of World War II, although its antecedents in higher mathematics, probability theory, and rapid computation go far back of that period. Its accelerated growth in recent years has been made possible by the development of rapid computing machines, particularly those using electronics, since much of the contribution of operations research lies in the application of mathematical formulas, the utilization of which might be seriously limited if it were not for the availability of fast and economical computation.

However, the basic tool and perhaps the major contribution of operations research has been the construction and use of conceptual models[4] for decision making. There are all types of conceptual models. Some assert logical relationships only, while others are mathematical, in the sense that quantity relationships between variables are shown. Models may be referred to as descriptive if they are designed only to describe the facts of a problem and their relationships. But the models useful for business planning are referred to as policy models, designed to lead to the selection of a course of optimal action from among available alternatives.

In order to construct a policy model, it is necessary to express in some kind of terms the objectives sought (*e.g.*, profit maximization or maximization of return on invested capital), to set forth the alternative courses of action and the facts or probabilities bearing on each, and to evaluate these courses of action in terms of the objectives sought. The experienced business planning analyst will recognize these ingredients of a policy model as those considerations he has always applied in coming to a recommendation for a course of action. He will recognize that in the process of evaluation, as indicated in the previous section, the various courses of action are weighed against the objectives sought. In fact, long before the term "operations research," the planning analyst constructed a model in the form of a forecast of costs, revenues, and profits, with each of the most attractive alternatives tested for profitability. He will also be aware that, after all the quantitative tests are made, one must temper his recommendation with consideration of intangibles.

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[3] Much has been written on this subject. See especially A. N. Watson, "Operations Research and Financial Planning," *Techniques and Data for Planning Financial Policy*, Financial Management Series, No. 102 (New York: American Management Association, 1952), pp. 3–12; R. W. Crawford, "Operations Research and Its Role in Business Decisions," *Planning for Efficient Production*, Manufacturing Series, No. 206 (New York: American Management Association, 1953), pp. 3–15; P. M. Morse and G. E. Kimball, *Methods of Operations Research* (New York: John Wiley & Sons, Inc., 1952).

[4] Crawford, *op. cit.*, p. 5. A "model" in this sense is a "symbolic representation of the process within which or about which the decision is to be made" (p. 6). In other words, it is a kind of tabular summary of all the pertinent facts, expressed in numbers or other symbols, dealing with a particular problem.

Thus, the essential methods of operations research are not new in business planning, nor do the proponents of this technique so declare. What is important and is new are (1) the mathematical formulation of models that include many more quantifiable variables than before; (2) incorporation of probabilities in strategy considerations; and (3) utilization of advanced mathematical techniques.

These are important advantages, and the contributions of this new technique to decision making, realizable through the availability of rapid computing machines to handle the complex calculations involved, can very well revolutionize the planning activities of the business manager in future years. The ultimate goal of the operations researchers is to be able to formulate such complete models for policy decisions that every variable, every parameter of the problem, every probability, and every decision made or likely to be made in a related field will be included. It is even hoped that the use of this approach to decision making will extend to decisions of any significant kind at any level in the business.

While this ultimate goal will probably never be attained and while many major decisions are likely always to be made on the basis of informed judgment, hunch, experimentation, or other nonmathematical grounds, the recent emphasis on the operations-research technique has extraordinarily interesting possibilities for improving business planning. One difficulty will always be the problem of giving quantitative measurement to the many intangible and unmeasurable considerations that necessarily affect decision making. Until these factors can be quantified as required for higher mathematics, the techniques of operations research will have limited usefulness in some areas of decision making. Many selections between alternatives, and perhaps most major ones, will continue to be made on nonquantitative judgments. However, the weighing of quantitative factors, the studied inclusion of probabilities, and the tendencies of model making to force consideration of influential factors are characteristics of the operations-research technique that will certainly improve the quality and ease the task of planning.

Selected References

Barnard, C. I., *The Functions of the Executive*, Chaps. 13–14. Cambridge, Mass.: Harvard University Press, 1938.

Charnes, A., W. W. Cooper, and A. Henderson, *An Introduction to Linear Programming*. New York: John Wiley & Sons, Inc., 1953.

Claque, E., "Planning Guides for Industry," *Dun's Review*, October, 1948.

Crawford, R. W., *Operations Research and Its Role in Business Decisions*, Manufacturing Series, No. 206. New York: American Management Association, 1953.

Herrman, C. C., and J. F. Magee, "Operations Research for Management," *Harvard Business Review*, vol. 31, no. 4, pp. 100–113 (July, 1953).

Morse, P. M., and G. E. Kimball, *Methods of Operations Research*. New York: John Wiley & Sons, Inc., 1951.

Newman, W. H., *Administrative Action*, Chap. 6. New York: Prentice-Hall, Inc., 1951.

———, *Business Policy and Management*, 2d ed., Part II. Cincinnati: South-Western Publishing Company, 1949.

Terry, G. R., *Principles of Management*, Chap. 7. Homewood, Ill.: Richard D. Irwin, Inc., 1953.

Watson, A. N., *Operations Research and Financial Planning*, Financial Management Series, No. 102. New York: American Management Association, 1952.

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THE OPERATION OF PLANNING

Both in the study of alternatives and in the execution of the plan selected, the financial aspects of planning play an important role for the business firm. Since it is ordinarily the objective of the business to maximize profits and to utilize capital resources efficiently, it is necessary for any plan to be translated into financial terms, if at all possible, in order to foresee the effects of the plan on profits and on capital utilization. This involves making forecasts of expenses, revenues, and profits, as well as forecasts of capital requirements and cash flow. The cash forecast, as will be seen presently, is particularly significant because it is the availability of cash in a business that, as a practical matter, determines its ability to meet obligations.

Naturally, only major plans and the expected operation of the sum total of all plans of the enterprise are usually translated into financial forecasts. Many plans are not easily translatable into financial terms, such as organization planning or a course of action to improve employee morale or better public relations. Other plans may be measurable in financial terms but may be of such minor importance as not to justify the time and effort for doing so.

In addition to working out various financial forecasts, the operation of planning requires formulation of derivative plans, coordination with related plans, communication with persons carrying out plans, and study of the actual execution of plans. As will be readily realized, when the operation of planning moves into that phase where the manager is checking upon the actual execution, it becomes control and not planning. Planning is essentially the choosing of a course of action, while control is the measurement of actual and anticipated action against plans, with a view to detecting and correcting deviations.

The Expense and Revenue Forecast

One of the essential tools of good planning is the forecast of expenses and revenues. This forecast may be for the enterprise operation as a whole, or it may be utilized to estimate profits expected from a given course of action. It may also be used as a means of evaluating alternative courses of action. It may be made for a short period of a month or two or for longer periods of one, three, or more years.

The expense and revenue forecast is, in essence, an income statement for the future. In its most complete sense, when made for enterprise operations as a whole, it is the same as an accounting statement of profit and loss, except that it is for a future period. Like income statements, the expense and revenue forecast is useful not only as a means for determining expected profits but also as a means for anticipating effects of expenses, revenues, and profits on balance-sheet items, particularly cash.

Basic estimates for the expense and revenue forecast. A forecast of expenses and revenues expected from any proposal, any adopted course of action, or for the enterprise as a whole can be made without difficulty if the basic data are available. In its simplest sense, on the revenue side, these will include the number of units of a good that can be sold, at what times, and at what prices. The sales forecast discussed in Chapter 21 is the primary source of these revenue data. On the expense side, the forecaster will require estimates of items basic to cost determination. These may be the number of man-hours required to produce an item at various quantities of output and at various times, the cost and quantity of materials required, estimated factory burden and administrative costs, the capital equipment needed and its utilization and depreciation costs, and estimates of nonrecurring costs anticipated, such as training and promotional expenses. What is needed, in other words, is precisely what the accountant later requires for an income statement.

As in the case of many business problems, when a forecast is broken into the basic information required, the problem becomes relatively simple, and the process one of careful accounting arithmetic. However, as is also the case with other business problems, the breaking down of the forecast requires careful analysis to make sure that all items affecting costs and revenues are included and that the basic estimates used are as realistic as possible. Often a small error in an important item can magnify the total results so much as to be disastrous, especially in those businesses where profit margins are slender and a few factors are strategic.

Some of the basic estimates for a financial forecast will be furnished by the planning premises of the firm. Included in this group are such factors as future markets, labor rates, material prices and availability, and interest costs. Other estimates must be made on the bases of internal studies, experience, or informed "guestimates." The lessons of experience, especially as interpreted by production or financial experts, are often extraordinarily valuable sources of the basic factors necessary for forecasts.

Translating basic estimates into a special forecast: a hypothetical case. Perhaps the clearest way to describe the processes of developing an expense and revenue forecast is to take the case of a small business that plans to produce and sell for the military market a mechanical device brought to it by an inventor. It is assumed that this device is one believed to be superior to existing units for muffling the noise of jet aircraft. After studying the market possibilities and the cost elements involved in producing these mufflers for a five-year future period, the managers of the business arrive at the following basic estimates:

1. A total quantity of 1,000 units can be produced and sold in the first year at a price of $600 each; 2,000 units can be produced and sold in the second year at $500 each; and 3,000 units can be produced and sold during each of the third to fifth years of operation at a price of $450 each.
2. Operating cost estimates include the following basic items:
   a. Average direct labor costs for the five-year period will be $2.00 per hour.
   b. Direct labor-hours will be 100 per unit in the first year, 80 per unit in the second year, and 60 per unit thereafter.
   c. Purchased materials will amount to $150 per unit during the first year and $140 per unit thereafter.
   d. Factory burden costs (excluding depreciation) will total $100,000 during the first year, $175,000 during the second year, and $225,000 each year thereafter.
   e. Administrative and selling expense will total an additional $50,000 beyond that already being spent by the company during the first year, $75,000 during the second year, and $100,000 per year thereafter.
   f. During the first year of operations certain nonrecurring costs will be incurred for training, initial promotion, and expected losses due to high rejects during the period of learning, costs estimated to amount to $50,000 for the first year only.
   g. Additional machinery, tools, and factory-space improvements are expected at a cost of $100,000 during the first year, an additional $75,000 in the second year, and $50,000 in the third year; the company decides to estimate costs on the basis of accelerated depreciation rates of 20 per cent per year.
   h. Interest costs for bank borrowings are estimated to be $5,000 in the first year, $8,000 in the second year, and $12,000 per year thereafter.

On the basis of these estimates of elements of revenues and expenses, the managers of the business make a forecast for each year and for the five-year period. This simple forecast is shown in Table 9. In most actual cases it would be set up more completely, with an outline of items similar to those required by the company's form of income statement.

It should be noted that the forecast includes, in addition to an item of net profit after taxes, an estimate of cash gain from operations. This estimate is important for purposes of estimating a firm's cash needs and differs from the amount of profits indicated by the amount of those expenses that do not require the payment of cash. In the case used here, the only such item is assumed to be depreciation of machinery, tools, and space improvements. The cash gain from operations is consequently

Table 9. Five-year Forecast of Revenues and Expenses

	First year	*Second year*	*Third year*	*Fourth year*	*Fifth year*	*Five-year total*
Revenues	$600,000	$1,000,000	$1,350,000	$1,350,000	$1,350,000	$5,650,000
Normal operating expenses:						
Direct labor	$200,000	$ 320,000	$ 360,000	$ 360,000	$ 360,000	$1,600,000
Materials	150,000	280,000	420,000	420,000	420,000	1,690,000
Factory burden	100,000	175,000	225,000	225,000	225,000	950,000
Depreciation	20,000	35,000	45,000	45,000	45,000	190,000
Administrative and selling	50,000	75,000	100,000	100,000	100,000	425,000
Total normal operating expenses	$520,000	$ 885,000	$1,150,000	$1,150,000	$1,150,000	$4,855,000
Nonrecurring expenses	50,000	...	...	...	...	50,000
Total operating expenses	$570,000	$ 885,000	$1,150,000	$1,150,000	$1,150,000	$4,905,000
Estimated interest expense	$ 5,000	$ 8,000	$ 12,000	$ 12,000	$ 12,000	$ 49,000
Net profits before taxes	$ 25,000	$ 107,000	$ 188,000	$ 188,000	$ 188,000	$ 696,000
Estimated applicable income taxes	8,000	53,000	93,000	93,000	93,000	340,000
Net profit after taxes	$ 17,000	$ 54,000	$ 95,000	$ 95,000	$ 95,000	$ 356,000
Cash gain from operations	$ 37,000	$ 89,000	$ 140,000	$ 140,000	$ 140,000	$ 546,000

greater than profits after taxes by the depreciation charge of $20,000 in the first year, $35,000 in the second year, and $45,000 through the fifth year.

While the forecast made for this hypothetical case is useful as showing a kind of model for financial forecasting, it should be noted also that actual business forecasts are usually divided into monthly periods, rather than yearly ones, as shown. Occasionally, the business firm forecasts its revenues and expenses for weekly or even daily periods. Forecasting for periods shorter than a year not only shows better the trend of revenues and expenses but also pinpoints the cash gains from operations. Furthermore, since financial forecasts often become budgets and are used for control, shorter periods furnish a more useful base for the manager, who would hardly wish to wait for a period as long as a year before ascertaining how close actual results are to those forecast.

Attention should be called to the fact that the forecast shown here is not an over-all forecast of revenues and expenses for the entire company but is limited to the product being tested. In the actual process of planning, similar forecasts would probably have been made for the most promising alternative courses of action.

The over-all profit and loss forecast. The development of an over-all profit and loss forecast for a company's entire operations for a week, month, year, or longer, would proceed on essentially the same basis as the special planning program forecast outlined in previous paragraphs. In a motor trucking business, for example, the annual profit and loss forecast might be prepared by utilizing the following steps: [1]

1. Obtain from the sales department a forecast of the number of tons, the average revenue per ton, and the revenue to be expected on all outbound shipments from each terminal.
2. Determine the transportation service units necessary to handle this volume of traffic, such units being vehicle line-haul-miles, ton-miles, tons handled over each platform, man-hours for pickup, delivery, and platform, and the number of shipments.
3. Summarize operating expenses that do not vary with the volume of traffic or sales, such as salaries and expenses of officers, building rentals, and license fees.
4. Utilizing performance and cost standards derived from experience and the various transportation service units found to be applicable in each case, complete the estimate of operating expenses by applying these standards to each primary expense account and appropriate secondary accounts. For example, maintenance expenses are found to vary largely with vehicle-miles, terminal expenses other than superintendence with tons and shipments handled, and line-haul expense with vehicle-miles and ton-miles.

In every business, there are statistical and financial factors that may reasonably be estimated from forecasts of sales volumes and used as bases for estimating expenses. Sometimes estimates made from such bases are extraordinarily accurate, particularly in such short-term periods as six months or a year. In other cases, careful analysis of experience will disclose improved methods and factors for making estimates. In all cases, if the statistical standards employed and their calculation are subjected to the intelligent judgment of well-informed production managers, sales managers, and other personnel familiar with a firm's operations, the results of revenue and expense forecasts can be surprisingly accurate. Some executives even speak of them as a method of planning specific profits.

The Cash Forecast

One of the essential instruments of business planning is the cash forecast. Profits are of questionable value if actually tied up in unsalable inventories or receivables. Even the profitable business may be hard pressed to pay its bills on time and avoid forced liquidation if cash is not available for handling obligations. Furthermore, the unprofitable business may be able to maintain operations and even expand if it has cash to do so. One of the most striking cases of recent years was the experience of the commercial airlines after World War II. Virtually every airline lost heavily during 1946 and 1947, and many lost considerable money in 1948. Yet no airline was seriously threatened with bankruptcy, although a few did have some difficulty at times in paying bills. The reason was that depreciation charges have traditionally been high in this industry and the cash available from operations on account of these high charges often made it possible for a company's cash position to be strong while its profit position was extremely weak. Obviously, long years of heavy losses must eventually take a real toll in cash as capital goods become fully depreciated, and losses cannot go on indefinitely without weakening a company because of its inability to replace depreciated or obsolete assets.

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[1] O. L. Doud, *Forecasting Financial Requirements of Motor Carriers* (Washington: American Trucking Associations, 1952), pp. 2, 3.

But the fact remains that perhaps the most important single kind of financial forecast for any business, whether large or small, is the forecast of cash. A business with a suitable amount of cash can always meet its obligations when due, will have cash for needed expansion, and will be in a position to replace worn-out or depreciated assets as required. Cash is also necessary for the business that would expand output even without the necessity for new machinery or other capital equipment. Expanded operations almost invariably require heavier working capital through the need for carrying larger inventories and more accounts receivable. Many is the business, particularly the small one, that has been "broke for cash" in the face of opportunities for profitable business expansion.

Cash forecasting a matter of timing as well as amount. Since the availability of cash is so strategic for successful business operations and since the flow of cash through a business is subject to many variations, cash flow, and hence cash forecasting, is a matter of timing as well as amount. For example, a forecast of revenues and expenses for a year may show a handsome cash gain from operations for the year as a whole. But if the flow of cash through operations were traced for each week, it might be found that during the first eight or ten weeks of the year or in a period during a certain month, the cash flow might be negative, and what appeared to be a cash gain for the year would represent a cash deficit of important proportions at one time during the year.

In the case of the muffler forecast outlined above, the estimated cash gain of $37,000 would undoubtedly represent a different picture if the cash gain at the end of the fourth month of operation were considered. Most of the nonrecurring expenses would have been incurred in that period. Of the revenues expected during the year, there would be a good chance that very little would flow into the enterprise in the first few months, simply because no deliveries of mufflers would probably have been made. In this case, then, it is entirely probable that at the end of the first four months of operation the cash loss from operations would be about $150,000.

This example emphasizes the importance of timing in cash forecasting. The ebb and flow of cash in a business enterprise may be largely erased over a period of a year. But for a period of a certain week or month the cash needs may be much greater or much less than that indicated by the longer period. Thus, the gross amount of cash needed to finance a business can be comprehended only by careful attention to timing.

Elements of the cash forecast. The forecast of cash for a business is made up of cash receipts and cash expenditures. The receipts include, in addition to revenues from operations, cash received from investment, borrowings, liquidation of assets, or any other source. Cash expenditures likewise include not only cash operating expenses but also expenditures for capital equipment, investment in new buildings, working-capital requirements, and interest, tax, and dividend disbursements.

In order to simplify the cash forecast, however, cash operating revenues and expenses are usually summarized in the form of net cash gain or loss from operations. Since the revenue and expense, or profit and loss, forecast is necessary for making a cash forecast, the results of cash flows from or to the normal operations of the business need only be summarized.

A simple cash forecast: a hypothetical example. Using the hypothetical case of the jet muffler program, one can construct a cash forecast for the project. While this cash forecast would not be for the firm's entire operations, but only for this particular program, many of the ingredients of the cash forecast are the same as for the revenue and expense forecast. However, certain additional basic estimates would be required. It might, for example, be assumed that study of the program disclosed the following information:

1. Cash expenditures other than for operations:
    - *a.* New machinery, tools, and space improvements are estimated to cost $100,000 for the first year; $75,000 additional in the second year, and $50,000 in the third year.
    - *b.* Inventory levels for the first year of production are estimated to equal $150,000; for the second year, $200,000; and for succeeding years, $240,000.
    - *c.* Accounts receivable for this product are expected to approximate $100,000 for the first year, $160,000 during the second year, and $210,000 thereafter.
    - *d.* The higher cash balances needed to furnish operating cash (because of higher payrolls and other expenses) are estimated to require an additional $20,000 during the first year, $35,000 during the second year, and $50,000 thereafter.

   e. It is assumed that income taxes will be currently funded through tax-anticipation note purchases, so that income-tax expenditures or withholding will not affect cash.
   f. A fund of $30,000 is believed to be ample for contingencies.
2. Cash receipts other than from operations:
   a. The original $100,000 for new machinery and tools can be financed without carrying charges to the extent of $50,000, payable in three annual installments, of $20,000 for two years and $10,000 for the third year.
   b. Inventories and receivables can be financed through utilization of bank credit to the extent of 50 per cent of the amount needed.
   c. Other cash requirements will be met from the owners of the business.

On the basis of these estimates, a five-year projection of cash flow on an annual basis can be made. This may be seen in Table 10. As in the case of the revenue and expense forecast, an actual cash forecast for a business would be broken into monthly or weekly forecast segments, especially for the near future, rather than in the years shown. This procedure is especially important, for, as has already been pointed out, cash needs for a particular time within a year may be considerably different from those for the year as a whole.

Table 10. *Five-year Forecast of Cash Receipts and Expenditures*

	First year	*Second year*	*Third year*	*Fourth year*	*Fifth year*	*Five-year total*
Cash receipts:						
Cash gain from operations	$ 37,000	$ 89,000	$140,000	$140,000	$140,000	$546,000
Borrowing on machinery and tools	50,000	...	...	...	...	50,000
Borrowing on inventory and receivables	125,000	55,000	45,000	...	...	225,000
Total cash receipts	$212,000	$144,000	$185,000	$140,000	$140,000	$821,000
Cash expenditures and requirements:						
New machinery, tools, and improvements	$100,000	$ 75,000	$ 50,000	...	...	$225,000
Increases in inventory	150,000	50,000	40,000	...	...	240,000
Increases in receivables	100,000	60,000	50,000	...	...	210,000
Increase in operating cash	20,000	15,000	15,000	...	...	50,000
Payments on machinery loans	20,000	20,000	10,000	...	...	50,000
Contingency fund	30,000	...	...	...	...	30,000
Total cash expenditures and requirements	$420,000	$220,000	$165,000	...	...	$805,000
Net cash required: end of each year	$208,000	$ 76,000	($ 20,000)	($140,000)	($140,000)	($ 16,000)
Net cash required: cumulative	$208,000	$284,000	$264,000	$124,000	($ 16,000)	($ 16,000)

Such differences may be considerable. Many of the cash expenditures required would occur in the first few months, such as those for new equipment and facilities, the establishment of a contingency fund, and expenses for promotion and training. At the same time, while regular operating expenses are being incurred, the company's pipeline of materials, goods in process, and finished inventory would be building up without any income from sales. In addition, an important lag exists from the time finished goods are delivered until they are paid for in cash. The result would surely be to build up net cash requirements considerably beyond those indicated for an annual forecast, which necessarily includes in it some of the profits from operations after the production is well underway. Indeed, if the net cash required from investment sources is $208,000 at the end of the first year, one would expect that the cash needs might reach $300,000 at the end of the third or fourth month of operations.

While a going business neither expanding nor contracting its operations might not suffer from wide cash-requirement variations, the expanding or contracting business will certainly do so. If a business is expanding, the very fact of expansion causes temporary bulges in cash needs while the business pipelines are being filled and a new level of operations (one in which the cash inflow reaches a normal amount for that level) is being reached. If a business is contracting, the cash inflow caused from liquidating inventories and accounts receivable may result in an unusual increase in cash. It is exactly these surges in cash requirements that make careful cash forecasting and planning of exceptional importance, especially to the business with limited capital and limited sources for quick cash borrowing.

Source and application of funds statements. The cash forecast is often referred to as a "source and application of funds statement." Indeed, if this statement depicts cash flow and starts and ends with cash rather than working capital, it is the same kind of instrument as the simple cash forecast. One of the differences often encountered in this kind of statement, however, is that it often starts and ends with working capital, the net of current assets over current liabilities. Since current assets may be tied up in receivables or inventories rather than cash, a forecast of working capital, while useful, may be illusory from the standpoint of the cash position of the firm.

A typical source and application of funds statement for several years in the future may be illustrated by Table 11, a hypothetical forecast of a trucking company. As will be noted, it follows the same forecast principles outlined above, with the exception that it starts and ends with working capital.

Pro forma balance sheet forecasts. Another variation of capital forecast that serves a useful planning purpose is the pro forma balance sheet forecast. While not a cash forecast, it does reflect cash flow if made in proper detail, and in addition depicts the flow of other assets and of liabilities and equity during a series of future periods. It is, in effect, a

Table 11. Source and Application of Funds Statement

	1955	*1956*	*1957*
Income:			
Net operating revenue	$5,000,000	$5,500,000	$6,000,000
Net income before income taxes	300,000	337,000	372,000
Net income after income taxes	$ 181,000	$ 195,000	$ 215,000
Add back: depreciation	210,000	255,000	335,000
Funds provided by income	$ 391,000	$ 450,000	$ 550,000
Working capital at beginning of year	256,000	230,000	175,000
Total funds available	$ 647,000	$ 680,000	$ 725,000
Application of available funds:			
Payments on loans	$ 244,000	$ 371,000	$ 372,000
Down payments on new equipment	101,000	91,000	49,000
Facility improvements	33,000	15,000	7,000
Shop and garage equipment	4,000	6,000	4,000
Freight dock equipment	15,000	13,000	11,000
Furniture and office equipment	20,000	9,000	6,000
Total application of funds	$ 417,000	$ 505,000	$ 449,000
Working capital at end of year	$ 230,000	$ 175,000	$ 276,000

succession of snapshots of the business for selected periods in the future. Although somewhat difficult and complex to develop, such a forecast may be extraordinarily valuable. In addition to cash position, a balance sheet forecast would show such significant elements of the business future as the ratio of current assets to current liabilities, the ratio of debt to net worth, inventory and receivables levels, and other strategic guides to financial performance.

The cash forecast and credit. A complete and realistic cash forecast is not only an essential instrument for careful planning of the business by its own managers but is equally important to creditors considering loans to the business. This is especially true for commercial bank loans, since the primary concern of the lender is that the borrower be able to repay the loan when due. Ample collateral may make a loan secure against loss, but the enforcement of rights against such collateral may involve bankruptcy proceedings, which are costly, subject to delay, and distasteful to the lender. The truest kind of security for a loan is the ability of the borrower to repay promptly, an ability best shown by the probability that he will have cash with which to do so. A carefully prepared cash forecast will serve to show whether the requisite cash will be available when needed. Consequently, banks are increasingly relying on such forecasts. To do so is sound practice, for the forecast not only shows the banker whether the loan can be repaid but also is evidence of careful financial planning.

Forecasts and Budgets

From the description of the financial forecasts made above, it can be seen that a good forecast becomes the basis for a good budget. A forecast of future operating revenues and expenses is a reflection of what is expected to be the financial results of a plan in operation. It, therefore, becomes a sound and realistic budget for future operations if the forecast realistically represents what is expected. Since a budget is usually considered a control mechanism, it will be discussed in detail in succeeding chapters. However, budgets are actually statements of plans in financial or other terms and, as such, are standards against which performance is measured. If, as is believed to be the case, control is the function of managers in making events conform to plans, then a good forecast becomes a budget against which events can be measured.

Not only is it true that a forecast of revenues and expenses forms the basis of a budget of operations, but a cash forecast forms the basis for the cash budget. Plans for the receipt and disbursement of cash are summarized in the cash forecast, which, in turn, is translatable into a cash budget.

To be sure, financial forecasts do sometimes differ from budgets as a matter of policy. It may be the policy of a company to make financial forecasts, realistic, or optimistic, or conservative, as the case may be, while at the same time establishing budgets on other grounds. For example, a company might wish a financial forecast to be somewhat on the optimistic side if it desires to make a case for liberal loan treatment, while making budgets on a more conservative basis in order to influence expense control. But in most instances the manager will find that realistic financial forecasting and realistic budgeting go hand in hand.

Completion and Coordination of the Planning Program

In the execution of plans, the manager will fail unless he recognizes the necessity for developing subsidiary or derivative plans to carry out a major plan, for timing such plans, and for obtaining participation in their operation.

Completion of derivative plans. It is almost never enough, in any plan, to decide upon a course of action without providing machinery for the establishment of subsidiary plans to accomplish the basic action. In the normal business operation, derivative planning becomes extraordinarily complex, with many parts of the organization contributing to the accomplishment of a certain course of action.

Even so apparently simple a plan as the selection of a new piece of factory machinery may require the development of many such subsidiary plans. Arrangements must be made for its purchase, its shipment, and payment. Plans must be accomplished for its receipt, unpacking, inspection, and installation. Space plans have to be ready so that the machine will be properly located. Plans for required power supply, maintenance, utilization, modification of production schedules, change of cost standards, and many other items of lesser or greater significance must be made if the plan of obtaining and using the machine is to be accomplished efficiently and effectively.

The importance of timing. One of the essential elements in effective planning is careful timing. Since the planning process is a complex of many major and derivative plans and since plans are necessarily related to one another, it is important that they fit together, not only in terms of content and action but also in terms of timing. Thus a retirement plan must be coordinated vertically through making sure that such derivative or subordinate plans as the funding of retirement insurance reserves, the methods of calculating retirement benefits, and the policy of giving effect to past service properly mesh with the basic retirement program. The plan must also be coordinated in a horizontal sense, in that the retirement program must be consistent with financing plans, plans for layoffs and leaves of absence, or of profit sharing. A plan, furthermore, to purchase certain needed parts rather than to make them requires such vertical planning as developing requirements and specifications for the purchasing agent, shipping arrangements, and receiving inspection procedures. In a horizontal sense, this plan may require readjustment of the program of fabrication, a shift in inventory procedures, and perhaps organizational changes to strengthen the position of the purchasing department or to make possible better coordination of engineering, purchasing, and manufacturing. Unnecessary costs are incurred, for example, if the purchasing agent obtains needed fabricated parts much too early or much too late for their use in the assembly of the final product. If inspectors are hired and trained too early or too late for handling the purchased parts, expenses are higher than they need be. Or if the traffic manager arranges for materials to be shipped before facilities are ready to handle them, excessive expense may result.

The problem of proper timing is one of the most difficult aspects of business planning, a fact readily apparent in the production process, especially in assembly-line operations, where an entire operation may be held up for lack of a single small part. Sometimes, the need for timing is not so apparent in other planning, such as the working out of an organizational plan, effecting a personnel program, or planning a sales strategy. A company may continue to operate fairly long if an organizational change is not made on time or if managerial personnel are not hired and trained on schedule to replace older executives nearing retirement. But the costs of poor timing in these less obvious areas may be considerable, even though considerably obscured by other events.

There are few areas, however, of major or minor planning in which timing is not among the most critical factors. Scheduling of future action is as much a necessity for sales, finance, personnel, and other plans as it is for making sure that materials, parts, and subassemblies are properly scheduled on the assembly line.

Information and participation. Plans cannot easily be coordinated without a free flow of information to those who are responsible for their execution. One of the principal causes for failure of business planning in practice is the neglect of top managers to inform their subordinates of plans being undertaken and of their part in them. An uninformed manager or employee is almost sure to be an ineffective one, no matter how much he wishes to play well his position on the team. One reason production planning has been so successful in most American business firms is that factory supervisors and their employees understand well what they are required to do.

Information must be as specific and thorough as possible. It is probable that the person required to execute a plan will do his best job if he understands the plan in its entirety, including the objective to be gained, the general and definite means of attaining it, the jobs others are expected to do, and his own assignment. In many cases, this is clearly impossible. The foreman in a large chemical plant can hardly expect to know top-management strategy in developing a new synthetic material, the chemical engineering involved, the part of the finance department in making available capital funds for development, the tax planning that has taken place, or the numerous accounting procedures that have been made necessary. There are limits to the amount of information any manager or employee can gain concerning a specific plan. But the existence of limits of time, capacity to absorb knowledge, requirements of business secrecy, or other factors should not detract from the wisdom of giving to participants as much information as possible.

One of the principal tasks of the manager in directing his subordinates is to interpret and explain plans of all kinds being executed at his level. Often halfhearted or even belligerent conformance with a management policy or program results from lack of understanding of the projected action. Much of the carping at the stupidity of the "brass" in a company for a certain policy or program might be eliminated if subordinates were in possession of adequate information. Experience in many companies has shown that the gain of having a fully informed group of managers and employees offsets losses, often greatly exaggerated, caused by a competitor's learning details of a planned action.

Planning control. Although, strictly speaking, to do so is within the control function of managers, effective planning requires action to assure that events conform to plans. Following up plans so blends with the planning process itself that the change from planning to control may seem imperceptible. This is well exemplified in the budgeting process. Budget making is planning, while budget administration, representing the follow-up of planning, is control. Moreover, even in the course of planning, some follow-up is necessary. Since complete planning requires the making of derivative plans and often the change of related plans, effective management dictates that managers on each level of organization must assure themselves that the additional plans necessary are actually made by their subordinates and that these plans are properly intermeshed.

The Limits of Planning

A discussion of the managerial function of planning would not be complete without special recognition of the limits of planning in practice. These limitations are not so great as to reduce seriously the effectiveness of making complete and adequate plans, and they should not be interpreted as reasons for not bending every effort to plan. Nevertheless, awareness of them can remove many of the frustrations and inefficiencies of planning.

The problem of accurate premises. One of the limiting factors in planning is the difficulty of formulating accurate planning premises. Since these premises are the background against which a set of plans is made, they necessarily deal with the future. Since the future cannot be known with accuracy, premising must be subject to a margin of error. As was pointed out earlier, accurate and reliable forecasting is necessary for good planning because it is the basis of most planning premises. As forecasting techniques advance and as an enterprise gives more time and attention to working out a careful prophecy of the future, premises are naturally improved.

It is possible for the planner to reduce the risks involved in uncertainties of the future. One way of doing so is to have alternative sets of premises, and alternative plans based on them, so that major changes in future events can be readily reflected in action. Another is to be ready with detours in planning to allow for unforeseeable events. Both of these require flexibility in future plans. This may take the form of utilizing plant facilities for an operation not originally intended, shifting an advertising program to reflect a revised sales policy, or changing radically a product line, to mention only a few examples of swift changes necessitated in plans by later events.

Flexibility is, however, only possible within limits. In the first place, an enterprise cannot always put off a decision long enough to make sure of its rightness in the light of future events. Decisions must be made sometimes well in advance of the environment for which they are required. For example, a company planning to build a new plant to serve a future market may be forced to make decisions that will bind it to a given course of action for years in the future. In the second place, built-in flexibility of plans may be so costly that the probable benefits of hedging are not worth the expense involved. For instance, a company may spend so much to make a new plant useful for producing products other than those intended as to make the costs not worth the advantages. Or a company may keep so financially liquid in preparing for the possibility of a business recession that the advantages of having large cash reserves may be less than the advantages of deferred opportunities for profitable expansion.[2]

Rapidity of change. Another important limiting factor in effective business planning arises from business dynamics. In a highly complex and rapidly changing industry, planning becomes extraordinarily difficult. The rapid succession of new problems attending change are often magnified by complexities so that planning assumes almost impossibly difficult proportions. The development of plans in the aircraft manufacturing industry during World War II, when the industry grew from one of a few small businesses to one of very large companies, was extremely difficult. When this growth was coupled with the fact that the product was exceptionally complex and rapidly changing, the planning problem during the first few years of expansion was almost beyond comprehension.

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[2] An interesting example of this kind of hedging may be seen in the cases of Montgomery Ward and Sears Roebuck in the period after World War II. Montgomery Ward, under the leadership of Sewell Avery, built up cash reserves of approximately 250 million dollars through 1952 but saw its share of the mail-order business fall from 40 per cent in 1942 to 28 per cent in 1951. Sears, on the other hand, under the leadership of Robert E. Wood, adopted an expansionist program and increased its share of the mail-order business from approximately 50 per cent to 66 per cent in the same period. Similar differences in position existed in the retail-store field for the two companies. Sears has also increased its profits relative to Ward's, its net income as a percentage of net worth having been significantly higher than Ward's. While the stock of Sears rose in price during the period, the stock of Wards fell. Had a depression occurred in the immediate postwar period, Montgomery Ward would have been in an excellent position to capitalize on its liquidity, and Sears might have been in a vulnerable position. For details on the operation of these two policies, see "Betting on a Depression," *Business Week*, Sept. 27, 1952, pp. 60–66.

Essentially the same kind of difficulty has existed in many other industries. The rapid change and expansion of the airline industry after World War II and the growth of the electronics industry after 1948 are noteworthy recent examples of highly dynamic business situations in which the job of effectively developing plans has been exceedingly difficult. One might contrast the job of planning in these dynamic businesses with the task in such stable businesses as a local water utility in New England or a flour mill in Minneapolis. While all businesses are subject to problems of change, the degree of instability and complexity caused by business dynamics varies considerably from industry to industry and as among firms within an industry.

Even in a highly dynamic industry, however, it is surprising how many problems are of a recurring nature. In every new problem, there may be the same cost elements, and a well-developed pricing formula may be useful for widely different problems. Likewise, the problems of manufacture and utilization of plant and machinery may have common elements despite the differences in product. If the common elements in new problems can be sought out and separated, the complexity of planning in a highly dynamic situation can be simplified.

Internal inflexibilities. There are many tendencies toward inflexibility in business operations that serve to thwart and limit effective planning. These may be divided between inflexibilities internal to the firm and those external to the firm. Among the major internal inflexibilities are those related to human psychology, policies and procedures, and capital investment.

Psychological Inflexibilities. One of the important internal inflexibilities is psychological. Managers and employees develop patterns of thought and behavior sometimes hard to change. A company may be so imbued with a tradition for operating flamboyantly or expensively that a program of retrenchment is difficult. For example, the attitudes of production at any cost developed during World War II in many war plants became a psychological point of view difficult to overcome in the more competitive cost-conscious era following the war. Also, the frame of mind, engendered by the excess-profits taxes in effect during and after the war, that a dollar of expense was only really eighteen cents, became a serious threat to efficient operation of many businesses in 1954.

In other cases, particularly in old, established businesses, there is a tendency for people to develop resistance to change. Managers and employees may eschew new methods, new products, and organization changes. Or a long period under close government regulations may bring about an attitude of running the business to avoid breaking the law, rather than to emphasize the quest for low cost and high profits. Persons familiar with the railroad business, for example, cannot help being impressed by the efforts taken to assure that freight bills are completely accurate. The original quotation and pricing made by the receiving agent is normally audited by the delivering agent, further audited by the regional accountants, again audited, at least on a sample basis, by the central office, and sometimes further audited by representatives of the Interstate Commerce Commission. One of the writers has seen small bills audited and checked to the extent where the cost of making sure the charges were accurate must have exceeded the amount of the bill.

That these psychological inflexibilities place blocks in the way of business planning is easy to understand. Many managers have been frustrated in their attempt to institute a new plan simply by the unwillingness or inability of people to accept the condition of change. Moreover, this is a difficult planning limitation to overcome. To do so requires patient selling of ideas, aggressive leadership, careful dissemination of information, and intentional development of a tradition of change among the members of the organization.

Procedural and Policy Inflexibilities. Closely allied to psychological inflexibilities are those rigidities inherent in established policies and procedures. Once established, policies and procedures tend to become ingrained in the enterprise, and their change becomes difficult. A way of doing things, a chain of reports or invoices, and the place of people in following out procedures often become so established that it is exceedingly hard to modify them. During World War II, for example, one of the large aircraft companies developed from a small operation to one of fourteen divisions and some 200,000 people. Its procedures, paper work, and checks were developed for this large, far-flung operation. When the war ended and the company shrank to two divisions and 25,000 people, the procedures of the previous large operation lingered on. So drastic was the change in scale and nature of the operations that what was needed was a complete revamping of procedures for guiding research and development, manufacture, and servicing of customers. Yet to do this would have required major overhaul of the company's operations, and this was not practicable. The result was a long and partially ineffectual program of gradual change of procedures, which certainly did much to thwart some of the new planning of the company's revised operations.

The resistance of policies and procedures to change was interestingly illustrated in the Hoover Commission study of the organization of the Federal government, begun in 1947.[3] The Commission found that essentially the same procedures were used for small government purchases as for large and that on over half of the three million purchase orders issued annually by civilian agencies the cost of paper work exceeded the cost of the items purchased. It found that the disposition of surplus property was governed by over 369 separate statutes, with new statutes being added to old until the weight of policy and procedure was stifling initiative and hamstringing efforts to improve handling the problem. The Commission also found most supply agencies overburdened with a surplus of complicated statistical and other records, many of which were obsolete, though few agencies had the kind of data needed for effective management of the function.

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[3] The summary of the Commission's findings has been published as *The Hoover Commission Report* (New York: McGraw-Hill Book Company, Inc., 1949).

One of the most convincing evidences of bureaucracy, whether in business or government, is the existence of complicated procedures designed to make sure that mistakes cannot be made. The existence of these procedures, many of which tend to become obsolete, especially in established enterprises, places a serious block to the institution of new plans and the development of new ideas. Progressive planning requires an environment of change with some reasonable degree of freedom and a willingness to assume the risks of mistakes. These are qualities difficult to find in an enterprise bound by the strait jacket of policy and procedural inflexibilities.

Capital Inflexibilities. In the discussion of planning, reference was made to the inflexibility inherent in invested capital. A new plant constructed or a new machine purchased and installed represents an investment of company resources, which are, to varying extent, "sunk" in the enterprise. Sometimes, if a company wishes to change its plans affecting such investment, it can sell the plant or the machine at a favorable price and thereby liquidate its investment. But in most cases, once capital is invested in a fixed asset, the ability to switch courses of future action becomes limited, and the fact of the investment itself becomes a planning premise for the future.

Capital inflexibilities also exist where investment is sunk in items other than what is normally regarded as a fixed asset. If a company makes an investment in training of a particular kind or spends its resources in building up a certain kind of customer reaction to its product through advertising, packaging, or other devices, the funds so invested tend to become sunk. As such, unless the company has ways to liquidate its investment on a reasonable basis or change the course of action intended, or unless it can afford to write off the investment, the very fact that these costs are irretrievable may place important blocks in the way of change. While it is a good axiom to disregard sunk costs in planning, since nothing can be done about them, it is nonetheless true that their existence does influence planning. If a management can retrieve any of these costs by bending its plans to recognize them, it gains an advantage in so doing, unless the course so selected is not as advantageous as one that forgets these costs. But whether it is good planning and good economics to disregard sunk costs in a given circumstance, their presence tends almost invariably to act as a factor influencing planning.

External inflexibilities. Other limits to planning arise from inflexibilities external to the firm. These are essentially the characteristics of the external environment over which the manager has little or no control. Among these are the social institutions, with their folkways, mores, codes, and laws within which the enterprise, as a social unit, must operate. While social institutions do change, they sometimes change slowly. But whether they change slowly or rapidly, the extent to which they resist the will of the business manager gives rise to inflexibilities that stand in the way of his planning.

To discuss completely the nature of these external inflexibilities would be to describe the entire social environment, including, in addition to social factors, the accompanying technological, geographic, and economic elements of the environment. A brief description of three major external factors will, however, be made.

Political Climate. Every business, to a greater or lesser degree, is faced with inflexibilities of the political climate that happens to exist at a given time. If the local, state, or national government has an active policy of business regulation, or if the national government adopts a high tariff policy or otherwise restricts free trade, these are elements that must be taken into account in planning. Likewise, tax policies cause inflexibilities, as do antitrust and fair trade policies. Moreover, the basic attitude of government as reflected in investigations of business practices has significant effects. Furthermore, in this day, when government has become business's largest customer, the procurement policies and programs of government agencies cause rigidities in business planning.

Labor Organization. The existence of strong unions, particularly those organized on a national basis, tends to restrict the freedom of the business manager in planning. The numerous wage- and working-condition provisions of union contracts and the influence of union policies on employee productivity and attitudes must be taken into account. In addition to being important environmental influences, they often give rise to definite inflexibilities. In the railroad industry, for example, management and unions entered into an agreement in 1936, providing for specific restrictions on a railroad's right to combine or to abandon service. These restrictions, in the form of dismissal compensation and preservation of job rights and influenced by the thinking of the Great Depression, place an important limitation on the ability of railroad managers to combine with other railroads or to abandon service; and the restrictions have been given the standing of law by the policy of the Interstate Commerce Commission of requiring such labor safeguards as a condition for approval of combinations or abandonments.

Technological Change. The rate and nature of technological change also are effective external limitations upon a firm's planning. There are perhaps few things as unyielding as the state of technological development. Not that technology does not change. It, of course, changes rapidly, and one new development begets another. But at any given time, the status of technical progress is a relatively inflexible thing. Even though a particular technical problem may be solved in making a planned course of action possible, the manager may find that another technical problem remains unsolved and that the full use of the solved one depends upon the unsolved. In developing an electronic fire-control system, for example, the way of guiding a projectile toward a target may be well understood, and it may be possible to engineer the necessary circuits, but the lack of proper development of a single tube or the susceptibility of another to vibration may delay the accomplishment of the entire plan.

Time and expense. Planning, like any other extensive use of time or materials, is costly. The effort that could be spent on forecasting, evaluation of alternatives, development of derivative plans, or other aspects of planning is almost limitless, the only effective brake being the cost to the firm and the time available to the manager before action must be taken.

From the standpoint of expense, the underlying principle that should be applicable to planning is simple: no firm should spend more on planning than the value of the benefits that might be expected. But the application of this principle is more complex, for a manager cannot easily know whether the amount of planning he undertakes will be worth the cost incurred.

But there are certain guides to planning expense that are useful. In the first place, a large firm can almost certainly engage in more thorough planning than a small one, for the reason that the ratio of planning expense to operating expenses or to the capital resources of the firm will be small. Many of the planning problems which face the small firm are almost as complex and varied as those which face the larger firm. Indeed, it is probably in the area of planning thoroughness, and the resources to accomplish it, that the large firm has an important advantage over its smaller counterpart.

In the second place, the more detailed planning becomes, the more expensive it will surely be. There is ever the existing danger, in large as well as small firms, that analysis of plans and formulation of the details of derivative plans may be so great as to be more costly than the benefits. One of the difficulties of modern engineering and production planning is that a small project may receive the same attention as a large project. One of the authors recalls a case where a project undertaken by a large aircraft manufacturer for a minor modification of an airplane required some 3,000 man-hours of engineering and production planning time to accomplish a job requiring 50 direct-labor-hours, when, had the job been done on a relatively unplanned basis, the planning time could have been reduced to some 30 man-hours, with only a doubling of the direct-man-hours involved.

In the third place, it is a characteristic of planning that, the longer in the future plans are projected, the more costly they are likely to be. Unless forecasts for a long time in the future are to be little more than informed guesses or if long-term plans are to be worked out more than in outline form, the cost of investigation and of fitting plans together, especially to arrive at a tolerable margin of error, is likely to be extremely high. Here again, the strategic factors are the importance of the plan to the future of the business and the resources that the firm, in the light of this importance, can afford to spend to perfect its long-range plans. To a large business and for major plans, this stretching of the planning period for years in advance may well justify heavy expenses. But, for the small firm, the costs involved may justify the manager's doing a careful job of planning for the near term, while relying on hunches and judgment for the longer term.

In addition to the sheer expense of planning, which necessarily at some point places a limit on planning, the time available is also an important limiting factor. There comes a time when a decision must be taken, when a course of action must be selected, and when plans must be translated into action. Whether ready or not, the management may be forced to move. However, time will not be so limiting for the manager who plans adequately and well in advance. Good planning reduces the occasions when the manager may be forced into snap decisions under the pressure of crises or the necessity for fighting business fires.

Selected References

Brelsford, E. C., *Budgetary Control and Financial Forecasting*, Financial Management Series, No. 87. New York: American Management Association, 1947.

Doud, O. L., *Forecasting Financial Requirements of Motor Carriers.* Washington: American Trucking Associations, 1952.

Forecasting Financial Requirements, Financial Management Series, No. 87. New York: American Management Association, 1947.

Goetz, B. E., *Management Planning and Control*, Chaps. 5, 8, 10. New York: McGraw-Hill Book Company, Inc., 1949.

Hamor, W. A., "How Well Can Management Predict?" *Advanced Management*, vol. 12, pp. 159–164 (December, 1947).

Hartogensis, A. M., "Budget Investigation by Dead Reckoning," *Advanced Management*, vol. 15, pp. 18–20 (May, 1950).

Newman, W. H., *Administrative Action*, Chaps. 4, 7. New York: Prentice-Hall, Inc., 1951.

A Program of Financial Planning and Controls: The Monsanto Chemical Co., Financial Management Series, No. 103, Chaps. 4, 7. New York: American Management Association, 1953.

PART SIX

CONTROL

CONTROL PROCESS

1) EXACT DEFINITION IN FIGURES OF WHAT IS TO BE D
   a) Objectives
   b) TRANSLATIONS OF Objetives INTO figures

2) MEASUREMENT – QUANTIFICATION
   a) EXPRESSED IN PHYSICAL UNITS

3) CONVERSION OF WHAT HAS BEEN MEASURED INTO STANDARDS OF PERFORMANCE.
   a) FOUNDATION OF CONTROL
   b) PLAN

4) COMPARE ACTUAL PERFORMANCE WITH STANDARD PERFORMANCE
   EXAMPLE
   5% NET PER $1.00 SALES
   4.6% NET PER $1.00 SALES

5) DETERMINE CAUSE OF ANY VARIATIONS OF ACTUAL PERFORMANCE FROM STANDARD
   a) REPORTING SYSTEM

25

THE PROCESS OF CONTROL

The managerial function of control is the measurement and correction of the performance of subordinates in order to make sure that enterprise objectives and the plans devised to attain them are accomplished. It is thus the function whereby every manager, from the president to the foreman, makes sure that what is done will be that which is intended. As Fayol so clearly recognized decades ago,[1] "In an undertaking, control consists in verifying whether everything occurs in conformity with the plan adopted, the instructions issued and principles established. It has for object to point out weaknesses and errors in order to rectify them and prevent recurrence. It operates on everything, things, people, actions." Or, as Goetz puts it, "Managerial planning seeks consistent, integrated and articulated programs," while "management control seeks to compel events to conform to plans."[2]

Thus control implies the existence of goals and plans. No manager can control who has not planned. There is no means by which a manager can make sure that his subordinates are operating in the manner desired to accomplish the action wished without having established a plan, no matter how vague this plan might be or for how brief a period of time. Naturally, the more clear, complete, and coordinated plans are and the longer the period of time for which they are made, the more complete managerial control can be.

Moreover, a moment's reflection will confirm that a manager cannot control the past. While the manager may effectively study past actions to see where and how they deviated from plans, his purpose in doing so is to ascertain what happened and why and, on the assumption that history tends to repeat itself, take steps to avoid recurrence of unwanted experience in plans in the future. Control, like planning, is ideally forward looking, and the best kind of managerial control is one that will correct deviations from plans *before* they occur. The next best method is to detect them as they are occurring. Just as the navigator continually takes readings to ascertain where he is relative to a planned course, so should the business manager continually take readings to assure himself that his enterprise or department is on course, and, if off course, revise plans to return his unit to the intended action. In fact, it is the function of control to make the intended occur.

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[1] Henri Fayol, *General and Industrial Management* (New York: Pitman Publishing Corporation, 1949), p. 107.

[2] Billy E. Goetz, *Management Planning and Control* (New York: McGraw-Hill Book Company, Inc., 1949), p. 229.

It is sometimes overlooked that control is the function of *every* manager. Occasionally so much emphasis is placed on top-management control that the impression is given that little control is needed at the lower levels. While it is reasonable to expect the control function to vary among managers, in view of the authority of upper managers and the resultant responsibilities for performance, it is nevertheless a fact that control is a major managerial function at every level.

Requirements of an Adequate Control System

Whether the manager is a top executive interested in such major matters as assuring that enterprise cash flows as planned, or is a supervisor concerned only with the proper scheduling of his labor force, certain requirements must be met before the control utilized can be effective.

Controls must reflect nature and needs of the activity. An adequate control system must reflect the nature and needs of the operation concerned. A system of control useful for the vice-president in charge of manufacturing will almost certainly be different in scope and nature from that of the foreman in one of the shops under his supervision. The basic control tools of the sales department will vary from those of the finance department, and these from the controls of the purchasing department. And a small business will doubtless need different kinds of controls from a large business.

Certain techniques, such as budgets, break-even points, standard hours or costs, or various financial ratios have general application in many business situations. However, it should never be assumed that any of these widely used techniques is applicable to a particular control area of a given company or department. It is the task of the manager to be alert to the strategic factors in his plans and operations that call for control and to make sure that the techniques used are suited to them.

Controls must report deviations expeditiously. Since the manager cannot do anything about the past and even rather little about the present, the best control system is one that will report deviations from plans expeditiously. As was noted above, the ideal system is one that detects deviations before they actually occur. In any case, the information must reach the manager as soon as possible, so that he can take action to head off continuing failures.

It is exactly because failures are not reported expeditiously that the typical accounting system in a business enterprise is often weak in furnishing control information. Accounting, having for its purpose the recording of transactions, naturally looks backward. Moreover, in the attempt to make accounting data comprehensive and accurate, such information often reaches the manager weeks or months after an event has taken place. It does a manager little good to find in November that he lost money in July because of certain inefficiencies in operations, even though, in the absence of better control information, this information may prove to be valuable. Most managers are finding that the usual accounting data must be supplemented with a kind of accounting estimate of the present and future.

Controls must be flexible. An effective system of control must be flexible. Controls must remain workable in the face of changed plans, unforeseen circumstances, or outright failures. As Goetz has remarked: [3] "A complex program of managerial plans may fail in some particulars. The control system should report such failures and should contain sufficient elements of flexibility to maintain managerial control of operations despite such failures."

The need for flexibility can be illustrated with several instances of control. If a company has a budget system that projects a certain level of expenses, and grants authority to managers to hire labor and purchase materials and services at this level, and if, as is usually the case, this budget is based on a level of sales that has been forecast, the budget, as a system of control, may become meaningless if the sales volume actually experienced is considerably above or below that forecast. One of the factors that has brought budget systems into ill repute among some companies is the lack of flexibility in such circumstances. What is needed, of course, is a budget system that will reflect sales variations as well as other deviations from plans if they occur. This has been provided, as will be noted presently, by the flexible budget.

In the case of production scheduling, the production manager must be prepared for failures occasioned by the breakdown of a machine or the illness of a key worker. If his control system shows only whether every element of production is on schedule, the loss of schedule, even though temporary, may occasion loss of control unless the techniques employed provide flexibility for just such a contingency. Much of this flexibility in control can be provided by means of having alternative plans available for various probable situations.

Controls must reflect organization pattern. Since events must be controlled through people, it is necessary that controls reflect the organization pattern. Duties are assigned, and authority delegated, to persons within an organizational unit. Organization, then, being the principal vehicle of coordination, is the means for maintaining control. The manager is the focal point of control, just as he is the focal point for the assignment of tasks and the delegation of authority.

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[3] *Ibid.*

The necessity for controls to reflect the organization pattern is perhaps nowhere better illustrated than in the case of cost accounting. One of the principal uses of product cost accumulation is for the control of unit cost in production. Yet if costs are accumulated in such a way as not to fit the organization structure of the manufacturing department, they may be useless for purposes in terms of materials, direct labor, shop indirect labor, and burden, and if the costs so summarized do not show each factory superintendent and each foreman what costs are accumulated in *his* department, actual costs may be out of line without the manager's knowing whether the deviation has been caused by something within his department. Fortunately, in recent years cost accountants have recognized the importance of relating cost data to organization structure, and the cost centers now typically used in industry provide usable data for the manager who has that portion of cost within the area of his authority.

Controls must be economical. Any control device must meet the standard of economy, must, in other words, be worth its cost. Although this principle is simple, its operation in practice is often very complex, for a manager may not find it easy to know what a particular system of controls is actually worth, nor may he be even aware what it really costs. Economy in undertaking a system of control is relative, since the benefits vary with the importance of the problem, the size of the business, the expense that might be incurred in the absence of control, and the contribution a system of control can make.

A small company cannot afford the extensive system of controls of a large company. The elaborate charts and detailed analyses used by the top management of the Monsanto Chemical Company or the du Pont Company doubtless represent hundreds of thousands of dollars in investment of time and many thousands each year for their maintenance. The expensive preparation, approval, and administration of such complex budgetary control programs may be a necessity for the large enterprise, and well worth their cost, but may be uneconomical for the small company. Likewise, a finance vice-president may feel that money has been well spent in incurring many thousands of dollars in cost for careful historical and forecast data on cash flow or capital investment, but in the same company a much smaller expenditure might be too costly for tracing the handling of scrap inventories.

Since one of the limiting factors applicable to control systems is relative economy, this, in turn, will depend a great deal on the ability of the manager to select for control only the truly strategic factors for those control areas of major importance to him. If control is tailored for the job to be done and if this tailoring takes into account the size of the enterprise and the importance of planning and control, the test of economy will probably be satisfied. On the other hand, it must be admitted that one of the economies of large-scale enterprise is the extent to which the larger business can afford to utilize expensive and elaborate systems of managerial control. Often, however, the magnitude of the problems, the wider area of planning, the difficulty of coordinating plans, and the loss of effectiveness of management through poorer communications may require such expensive controls in a large business that their over-all efficiency suffers in comparison to a small business.

Controls must be understandable. Controls must meet the test of comprehension for the managers who must use them. One of the problems encountered in some control devices, especially those based upon mathematical formulas, complex break-even charts, detailed analyses, and statistical summaries, is that they are not understandable to the managers who must use them. In some cases the manager would understand them if he would take the time to learn the techniques involved. But whether his lack of understanding grows from sheer complexity or his impatience to learn the complex, the effect is the same. Clearly, a control system that a manager cannot or will not understand is ineffective.

Many so-called experts in graphs, charts, advanced statistical methods, or exhaustive analyses fail to make an effective contribution to the manager within whose purview lies the function of control. One of the difficulties of "control" staffs and departments in business is that they often develop needed information that cannot or will not be used by managers. Simplicity or adaptability of controls is a requisite to any successful system of control. What may be valuable and comprehensible to one manager may not be to another, and it is up to the manager concerned (or his staff assistant) to make sure that he has available for his purposes the kind of control system that is understandable to him as well as adequate for his job.

Controls must assure corrective action. A control system that detects failures or deviations from plans will be little more than an interesting exercise if it does not show the way for needed corrective action. Thus an adequate control system should not only detect failures but should disclose where they are occurring, who is responsible for them, and what should be done to correct them.

Procedure in Control

Any technique of managerial control should meet the requirements outlined in the previous paragraphs. In addition, two basic prerequisites must be fulfilled. Unlike the requirements of an adequate control system, which are, in a sense, the tests of good control, the prerequisites of the process of control are conditions that must be met before control may be undertaken in an orderly and effective manner.

One of the prerequisites to undertaking control is the assurance that plans are clear, complete, and integrated. Moreover, the quality of planning, especially in terms of clarity, completeness, and coordination, must be such that those given the task of executing plans know well their role in the course of action intended.

A second prerequisite to control is the assurance that organization arrangements give necessary and coordinated authority to the subordinates who are expected to accomplish a task. If authority relationships are obscure or if a manager or employee does not have the power to do a given job, or does not know that he has the authority, the plan would almost surely fail of execution, and the superior manager would have only himself to blame for the failure.

The control process involves three steps: (1) the establishment of standards; (2) the appraisal of performance; and (3) the correction of deviations.

Establishment of standards. Strictly speaking, standards are established criteria against which actual results can be measured. They represent the expression of planning goals of the enterprise or the department in such terms that the actual accomplishment of assigned duties can be measured against these goals. Standards consequently may be physical, in the sense that they represent quantities of products, units of service, man-hours, speed, volume of rejections, and many other items of physical measurement. Standards may also be stated in monetary terms, costs, revenues, or investments.

While standards are usually stated in specific units, such need not be the case. A company may, for example, have a planning goal of accomplishing a high level of loyalty and morale of its foremen. Or a company may develop a public relations program to gain acceptance as a constructive force in the community. Objectives of such programs as these can seldom be stated in any numerical terms against which action can be specifically measured. On the other hand, even where goals are intangible, there are many means of determining whether action is tending toward them or away from them. Moreover, with new techniques of measuring such intangibles as customer, employee, and public opinion, many of these items are being subjected to fairly specific measurement.

Although it is not often practicable to do so, the measurement of performance against standard should ideally be on a future basis, so that deviations may be detected in advance of their actual occurrence and the deviation thereby avoided by appropriate remedies. However, it is surprising to what extent the alert, forward-looking manager can detect probable departures from standard before they actually occur. In the absence of such ability, it follows that good management requires that deviations be disclosed at the earliest possible moment.

Appraisal of performance. The second step in control is to appraise the actual or expected performance of persons concerned by comparing it to the standard. If the standard is appropriately drawn and if means are available for determining exactly what those charged with a certain task are doing, the task of appraisal is fairly easy. But there are many activities where it is extremely difficult to develop sound standards, and there are many that are hard to measure. It may be quite simple, especially with present techniques of time and motion study, to establish man-hour standards for the production of a mass-produced item, and it may be equally simple to appraise actual performance against these standards, since the item produced and the manner of its manufacture may be subject to accurate measurement. On the other hand, if the article is custom-made or is produced with special requirements, the appraisal of performance may be a formidable task.

Furthermore, in the less technical kinds of work, not only may standards be difficult to develop but appraisal may also be exceedingly hard. For example, to control the performance of the finance vice-president or the industrial relations director is not easy, for the reason that definite standards can seldom be developed and performance cannot be accurately measured. The superior of these managers tends often to rely on vague standards, such as the financial health of the business, the attitude of labor unions, the absence of strikes, the enthusiasm and loyalty of subordinates, the expressed admiration of business associates, and the over-all success of the department (often measured in a negative way by lack of evidence of failure). His appraisals are likewise often based on equally vague measurement. At the same time, if the department seems to be making the contribution expected of it at a cost deemed to be reasonable, without too many serious errors, and if the measurable accomplishments give evidence of effective management, the unavoidably general appraisal of performance may be adequate for the purpose. The important point is that, as the accomplishment of tasks moves away from the assembly line, the shop, or the accounting machine, the job of control becomes more complex and often more important.

Correction of deviations. The third step in control is to correct deviations. If standards are drawn so that they reflect organization and if performance is measured and appraised in these terms, the correction of deviations is clearly expedited, since the manager then knows exactly where, in the sense of individual or group assignments of duties, the corrective measures must be applied.

Standards for Strategic Control

It can be readily seen that the key to effective control is the establishment of standards, since they furnish the basis against which actual or expected performance is measured. In a simple kind of operation, it might be possible for a manager to control the activities under his supervision by observation. However, as operations become more complex or a manager's area of authority more broad, control through observation becomes impracticable, and other means must be selected. The manager must, therefore, choose certain points for special attention, with the belief that by watching them he can assure himself that the operation as a whole is proceeding as planned.

The selection of strategic control points. If the points selected for control are in fact the most strategic to the operation, either in the sense that they are the limiting factors or that they, better than any others, depict whether activities are occurring as projected, the manager can exercise his talents over a larger group of subordinates and thereby increase his span of management, with resulting benefits in cost savings and improvement of communication.

There are, however, no specific guides for the actual selection of such points because of the peculiarities of enterprise and department functions, the variety of products and services to be measured, and the infinite number of policies and plans. An almost unbelievable number of standards can be used to ascertain the quality of performance. The dimensions and material contents of an article can be spelled out in great detail. The rate of production can be gauged in rate per minute, hour, day, shift, month, or year. Costs likewise can be measured in terms of the various components, and each of these per unit or by lots of varying numbers of units. Business income can be measured by such widely different standards as profits before and after taxes, profits as a percentage of sales, return on investment, or capital turnover. Among the standards for measuring financial soundness of an enterprise are desired inventory levels, cash availability, working capital, depreciation reserves, and the many ratios useful in analyzing balance sheets, such as the ratio of current assets to current liabilities, of net worth to debt, and of net quick assets to short-term liabilities. Likewise, in personnel selection and training, in the quality of supervisory performance, in purchasing, traffic, public relations, and in all the many facets of business enterprise, there exist measurements of performance.

It is in the selection of strategic standards and in quickly and accurately comparing actual or expected performance with them that the manager in any position will succeed or fail in effective control. He must ask himself such questions as: What will best reflect the goals of my department? What will best show me when these goals are not being met? What will measure any abnormal deviations? What will give me information as to who is responsible if failure occurs? What standards can be employed at the least cost? For what standards is information readily available? The selection of these strategic problems is in itself one of the rare arts of management.

Strategic points and standards. There are, of course, many different standards of effective performance. Every broad planning objective, every goal of the many planning programs in the typical enterprise, every course of action of these programs, every policy, and every procedure creates standards against which actual or expected performance might be measured. They include (1) physical standards; (2) cost standards; (3) capital standards; (4) revenue standards; and (5) intangible standards.

Physical standards are those that deal with nonmonetary measurement of performance. They are common at the level of actual operations of a business where materials are used, labor employed, services rendered, and goods produced. They may be quantitative in nature, such as man-hours per unit of output, pounds of fuel per horsepower produced, ton-miles of freight traffic carried, units of production per machine-hour, feet of wire per ton of copper, or some other measure of quantity. Physical standards may also reflect quality, such as those used to measure the hardness of bearings, the closeness of tolerances, the rate of climb of an airplane, the durability of a fabric, or the fastness of a color. As Goetz has said, these physical standards are the "building blocks of planning," since, "whether management must choose between alternate policies, organizational configuration, procedures, or resources, it must always analyze the rival programs in terms of their physical elements, determine the financial implications of these elements, integrate or synthesize the elements into programs, and select the best program it can devise." [4] Just as physical standards are the building blocks for planning, they are by the same token the fundamental standards for control.

Cost standards include those bases of measuring that reflect the monetary expense of achieving a program or an element of a program. These, like physical standards, are commonplace in business, particularly at the operating level. They are, to a very real extent, the attaching of monetary values to the costs of operations. Illustrative of these cost standards are such widely used measures as direct and indirect cost per unit produced, labor cost per unit or per hour, material cost per unit, machine-hour costs, costs per plane reservation made, selling costs per dollar or unit of sales, or costs per foot of well drilled.

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[4] *Ibid.*, p. 93.

Capital standards are actually a variety of cost standards, since they arise from the application of monetary measurements to physical items. But, having to do with the capital invested in the firm, rather than costs of operations, and therefore related to the balance sheet rather than the income statement, they may be classified as a separate group of standards. Perhaps the most widely used standard for new investment, as well as for over-all control, is the ratio of net profits to investment, or return on investment. A glance at the typical balance sheet will disclose other important standards. Typical of these are ratios of current assets to current liabilities, debt to net worth, and fixed investment to total investment, cash and receivables to payables, notes or bonds as compared to stock, and the size and turnover of inventories.

Revenue standards likewise exist in the typical business in large numbers. These arise from attaching monetary values to sales. They may vary from such standards as revenue per bus passenger-mile and dollars per ton of steel shapes sold, to average sale per customer and sales per capita in a given market area.

Perhaps the most difficult of standards to understand are those that are not given to numerical measurement, whether in physical or in monetary terms. Much of the problem of establishing such standards exists in this broad area of managerial control. What standard can a manager use for determining the competence of the divisional purchasing agent or personnel director? What can he use for clearly determining whether the advertising program of the company meets both short-term and long-term objectives? Or when can he be sure that his public relations program is meeting the standard of success desired? Are foremen loyal to the company's objectives? Is the office boy meeting a standard of alertness and service? Such questions show how difficult it is to establish standards for goals that cannot be given clear quantitative or qualitative measurement.

One of the reasons so many intangible standards exist in business is that the same thorough research of what constitutes desired performance has not been made above the level of the shop, the district sales office, the shipping room, or the accounting department as has been made at these lower operating levels. Another reason, and doubtless the most important one, is that where human relationships are the dominant factor in performance, as they are above the basic operating levels, the problem of measuring what is "good," "effective," or "efficient" becomes extraordinarily complex. While tests and attitude surveys are being developed by the psychologists and sociometrists and sampling techniques have made it possible to probe human attitudes and desires, managerial controls over personal relationships must continue to be based upon intangible standards, the conclusions of considered judgments, trial and error, and even, on occasion, sheer hunch.

The Budget as a Control Device

One of the most widely used devices for effecting managerial control is the budget. Indeed, it has sometimes been assumed that budgeting is the device for accomplishing control. But, as will be noted, there are many nonbudgetary devices that are also essential. In fact, many companies attain a high degree of control without formal budgets, although effective control is seldom accomplished without utilizing the principles of budgeting.

The concept of budgeting. Budgeting is essentially the formulation of plans for a given period in the future in specific numerical terms. As such, budgets are statements of anticipated results. They may be stated in financial terms, as is the case with the expense and revenue and capital budgets, or they may be stated in nonfinancial terms, as is found in the instances of budgets of direct-labor-hours, materials, physical sales volume, or units of production.

The purpose of budgeting. From the numerical statement of plans and the breaking of these plans into components consistent with the organization structure, budgets furnish a device for correlated planning and a means whereby authority may be broadly delegated without loss of control. In other words, the very process of reducing plans to definite numbers forces a kind of orderliness that might not otherwise occur, thus giving the manager the ability to see clearly what capital will be spent by whom and where, what expenses, what revenue, or what units of physical input or output. Through forcing this kind of orderly definiteness, the manager can then better see how a plan will work out and, having ascertained this, can more freely delegate authority to subordinates to effectuate the plan so long as they are limited to the requirements of the budget.

It is sometimes forgotten that budgets serve purposes beyond that of control. A budget not only requires considered planning but is an instrument of planning in the first place. Moreover, a budget, to be useful to a manager at any level, must reflect the organizational pattern by breaking down the elements of plans into their organizational components. Only when plans are so complete, so well coordinated, and so well developed that they can be fit into departmental operations can a useful departmental budget of any kind be prepared. Then, if it is well prepared, the budget becomes an effective instrument of control, since the terms of the budget become the standards against which actual or expected performance is measured.

The use of the budget as a planning, as well as a control, instrument has several important implications. It should reflect actual plans and should be based upon actual expectations rather than ideal goals. A budget should also be flexible, in that it should change as plans change. And just as planning is regarded as a managerial function, separate from, albeit closely akin to, control, so should budget *making* be regarded as a function separate from budget *administration.* Controllers and budget administrators sometimes forget this simple truth and undertake to make and administer budgets without realizing that they are assuming responsibility for planning the operations of the departments for which budgets are designed to apply.

Types of budgets. Since budgets are the expression of plans in numerical terms and since the typical enterprise has a large variety of plans, there are many types of budgets. One author, for example, finds that the average manufacturing company requires twenty-eight major types of budgets to have "complete" budgetary control.[5] These include the following types of budgets: sales order, sales shipment, inventory, production requirements, direct labor, material, direct manufacturing expense, prorated manufacturing expense, administrative distributive expense, executive-division expense, industrial relations, accounts receivable, purchasing-division expense, distribution or sales expense, advertising, permanent-plant expense, perishable-plant expense, cost of sales, cost of goods manufactured, prepaid expense, purchase, accounting-division expense, accounts payable, payroll, profit and loss, cash, balance sheet, and master budgets. For purposes of clarity, however, they may be classified into five basic types of budgets and a sixth type, the budget summary, which summarizes the total planning picture portrayed by the budgets. The basic types of budgets appear to fall into the following classifications: (1) expense and revenue budgets; (2) time, space, material, and product budgets; (3) capital expenditure budgets; (4) cash budgets; and (5) balance sheet budgets.

Expense and Revenue Budgets. By far the most common types of budgets found in the business enterprise are those that spell out plans for revenues and operating expenses and express them in dollar terms. The most basic of these is the sales budget. It is the formal and detailed expression of the sales forecast, and, just as the sales forecast is the cornerstone of all enterprise planning, the sales budget is the foundation of the company's budgetary control program. While there may be other revenues that a company may budget, such as expected income from rentals, royalties, or miscellaneous sources, the revenue from sales of its products or services will furnish the principal income to support operating expenses and yield profits.

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[5] J. K. Lasser *et al.*, "How to Use Budgets for Control of a Business," in *J. K. Lasser's Executive Course in Profitable Business Management*, sec. 16 (New York: McGraw-Hill Book Company, Inc., 1952), p. 553.

The number of operating expense budgets of the typical business enterprise can be as numerous as there are expense classifications in its chart of accounts and units of organization in its organization structure. These budgets may deal with individual items of expense, such as direct labor, materials, supervision, clerical, rent, heat, power, traveling expense, entertainment, office supplies, shop supplies, and the many other items that normally enter into operating costs. In some cases, the department head will budget only major items of expense and lump together other items in one control summary. But, where budgetary control is employed, the best guide to follow is to handle any item of expense separately, where doing so gives the manager of that department the tool to make sure that events as they transpire agree with plans made. For example, if the manager of a small department is expected to take one business trip in a year at a cost of $96, a practice of budgeting this cost each month at $8 would have rather little meaning for planning or control purposes.

Time, Space, Material, and Product Budgets. Many budgets in the operations of a business are better expressed in physical than in monetary terms. While such budgets are usually translated into monetary quantities, they are much more significant at a certain stage in planning and control if dealt with as physical quantities. Among the more common of these are the budgets for direct-labor-hours, machine-hours, units of materials, square feet of space allocated, and units produced. Most firms budget product output, and most departments having some production function budget their share of the output of components of the final product. In addition, it is common to budget manpower, either in labor-hours or man-days, and by types of manpower required. As can be seen, these budgets and many others cannot be expressed most effectively in monetary terms, since the dollars' worth involved would not give an accurate measurement of the planning results intended.

Capital Expenditure Budgets. While operating expense and revenue budgets tend to be the most numerous in the budgetary control programs of enterprises, the capital expenditure budget is likely to be one of the most important. It outlines in specific terms the expenditure of capital funds for plant, machinery, equipment, inventories, and other items that require such funds. Whether for a short or a long term, these budgets require unusual skill and care, since they give definite form to the plans by which the resources of the enterprise are expended. Since capital resources are generally one of the most limiting factors of the business and since investment in plant and equipment usually requires a long period for its recovery from operations, thereby causing inflexibility in this extremely strategic factor, capital expenditure budgets require long-term planning, are difficult to make, but are of major importance to the future of the enterprise. Even the top managers of a company who feel that budgets can be disregarded as instruments of control over operations can seldom risk not having some kind of budgeting of capital expenditures.

Cash Budgets. The cash budget is simply a forecast of cash receipts and disbursements against which actual cash experience is measured. Whether called a budget or not, this forecast is perhaps the most important single tool of business control. Companies often fail for lack of cash and more often from this cause than for lack of profits. As was pointed out earlier, the availability of cash to meet obligations as they fall due is the first requirement of business existence, and it does a firm little good to show handsome profits if these are tied up in inventory or machinery or other noncash assets. Cash budgeting can also show when the company will have available excess cash, thereby making possible planning for investment of this cash in profit-making activities.

Balance Sheet Budgets. Another type of budget, although one not always used in this form, is the balance sheet budget. It is the forecast of the status of assets, liabilities, and capital account of the firm as of particular times in the future. In a very real sense, the balance sheet budget proves the accuracy of all other budgets, since the sources of changes in balance sheet items are the various other budgets.

In addition to the balance sheet budget, depicting the forecast status of the business as a whole, there are many items of the balance sheet that may be budgeted in various degrees of detail. The more common, in addition to cash and capital investments, are special budgets of accounts receivable, inventories, and accounts payable.

Budget Summaries. Balance sheet budgets, if complete, are a form of budget summary. In addition to these, a master budget gathers together all the various kinds of budgets for the several departments of a business and summarizes them, first in the form of a forecast income statement, and then in a forecast balance sheet. It may be in detail, or it may be in a summary form showing only the principal items of revenue, expense and profit (*e.g.*, net sales, cost of sales, gross profit, administrative and selling expenses, net operating profit, other income and charges, income taxes, and net profit), and the principal items of the balance sheet.

Dangers in budgeting. Budgetary programs need not be complete to obtain important benefits to make them work. As a tool of management, budgets should only be utilized where they materially assist in major planning and control. In fact, some budgetary control programs are made so complete and so detailed that they become cumbersome, meaningless, and unduly expensive. There is danger in overbudgeting, through spelling out minor expenses in too much detail and through taking away from the manager some needed freedom in operating his department efficiently and effectively. In one enterprise, for example, the department head was thwarted from doing an important bit of sales promotion work because expenditures for office supplies had exceeded earlier estimates, and new expenditures had to be limited even though his total departmental expenses were well within the budgeted limits and he had funds to pay personnel for writing the sales promotion letters called for. In another enterprise, the expenses of a department were budgeted in such useless detail that the cost of budgeting exceeded the amount of expense controlled.

Another difficulty with budgeting is the tendency to allow budgetary goals to supersede enterprise goals. In his zest to keep within budget limits, a department manager may forget that he owes his primary allegiance to the enterprise and to the objectives of the business. The authors recall a company with a thorough budgetary control program in which the sales department could not obtain information needed for selling from the engineering department on the grounds that the latter's budget would not stand such expense! This conflict between partial and over-all control objectives, the departmental independence sometimes engendered, and the consequent lack of coordination are symptoms of inadequate top management, since no budget system can be so perfect or omniscient as to replace common sense in management. Not only must the system have some flexibility to permit expenditures in the prosecution of enterprise objectives, but budgets must be regarded as a tool of management and not as the substitute for management.

One of the latent dangers sometimes found in budgetary controls is the tendency for budgets to hide inefficiencies. Budgets have a way of growing from precedent, and the fact that a certain expenditure was made in a prior period becomes prima facie evidence of its reasonableness in a current period. If a certain department spent a given amount for supplies for a previous period, this tends to become a fixed floor in future budgets. Also, some managers soon learn that budget requests are likely to be pared down in the course of their final approval and therefore ask for much more than they actually need. The somewhat deceptive definiteness of reducing plans to budget figures should never be allowed to overshadow the basic purposes of planning and control. Unless budget making is accompanied with constant reexamination of standards and the other bases by which planning policies are translated into metric terms, there is a danger that the budget may become an umbrella under which slovenly and inefficient management can hide.

Perhaps the greatest danger in controlling through budgets is the inflexibilities developed. Even if budgeting is limited only to major items and is not used to supplant management, the very fact that plans are reduced to numerical terms gives them a kind of illusive definiteness. It is entirely possible that events will prove that a larger amount should be spent for this kind of labor or that kind of material and a smaller amount for another, or that sales will exceed or will fall materially below the amount forecast. These and other differences may obsolete a budget almost as soon as it is made, and, if the manager must stay within the strait jacket of his budget in the face of events requiring revision of plans, budgets may become so much an instrument of inflexibility as to reduce or negate their usefulness. This is especially true where budgets are made for long periods in advance.

One of the primary problems of budgeting in government, for example, is that plans for expenditures must be made, and budgets thereby created, months and sometimes two or three years ahead of actual expenditures so that the appropriations may be presented to and approved by the legislature. It is not easy for the dean of a state college to foresee exactly his needs (for stationery and supplies and travel expense, as well as instruction) for months or years ahead, or for the head of the research department of a state or Federal regulatory agency to foresee exactly what manpower and other expense allowances he will require for a long period of time.

In a business the danger of inflexibility can be extremely important. With the dynamics created by change and competition, the business manager must be ready to change his plans materially at short notice. Since budgetary rigidities may make it difficult or impossible for him to do so, it is understandable that many top business managers shy away from instituting such programs.

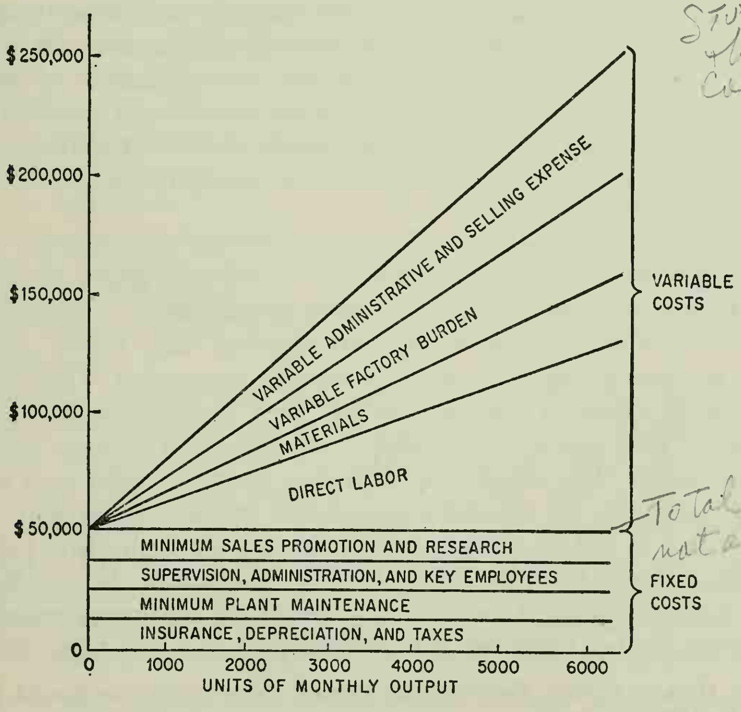
Flexible budgets. Because of the dangers arising from inflexibility in budgets and the widespread recognition that the maximum of flexibility consistent with efficiency underlies good planning, attention has been increasingly given to flexible budgets. These are designed to be variable usually as the volume of sales or production is varied. As such, they have been largely limited in their application to expense budgets.

The flexible budget is based upon an analysis of expense items to determine how individual costs should vary with volume. Some costs do not vary with volume of output, particularly in so short a period as a month, six months, or a year. Among these are depreciation, property taxes and insurance, maintenance of plant and equipment, and the costs of maintaining a minimum staff of supervisory and other key personnel on a readiness-to-serve basis. Admittedly, some of these fixed costs depend upon managerial policy. Costs for maintaining a minimum number of key or trained personnel, for advertising or sales promotion, and for research fall into this category.

What is [illegible]

In addition to costs that may be regarded as fixed, there are those that vary with volume of output. These range from costs that are perfectly variable with volume to those that are only slightly variable. The task of variable budgeting is to select some unit of measure that reflects volume, to inspect the various categories of costs (usually by reference to the company's chart of accounts) and, by statistical studies, methods-engineering analyses, and other devices, to determine how these costs should vary with volume. At this stage, each category of cost is given a factor relating volume and level of expenditure. Each department is given the factor related to its variable items of cost, along with definite dollar amounts for its fixed costs. Periodically, normally each month, department heads are then given the sales forecast for the immediate future, from which is calculated the dollar amounts of variable costs that make up the budget. In this way, a budget can be established for six months or a year in advance but be made variable with shorter-term changes in sales and output.

This type of budget may be illustrated by Figure 21, which depicts the fixed and variable portions of cost for a business enterprise. A chart of a departmental budget would have essentially the same appearance, naturally with the cost components suitable for the department.



Study this Chart

Total fixed cost not a[illegible] fixed

Fig. 21. Chart showing the variable expense budget.

One of the problems in all kinds of flexible or variable budgets is that the department manager has difficulty in laying his plans on anything like a long-range basis. It may be easy to tell a foreman that during the month of May he can have twelve trained electronic assemblers, then, several weeks later, tell him that he may have fifteen in June, and a month later inform him that his budget for July will permit the hiring of only ten. But with the problems of hiring and training competent personnel, these variations may prove to be more costly than their advantages in keeping expenses flexible and constant with sales. In other words, efficiency may demand that plans be less flexible and that the department manager not be expected to vary his plans and expenses with short-term variations in sales. In the quest for flexibility in budgets, as in the case of the employment of other tools of management, the intelligent manager will not lose sight of basic objectives and efficiencies by blindly following any system or device.

Other methods of obtaining budget flexibility. There are methods of obtaining flexibility in budgeting other than the so-called flexible or variable budgets. One is to establish alternative budgets for alternative eventualities. Sometimes a company will establish budgets for a high level of operation, a medium level, and a low level. In effect, three different budgets will be approved for the company as a whole and for each organizational segment for a period of six months or a year in advance. Then, at stated times, managers will be informed as to which budget to use in planning and controlling his operations. These alternate budgets are a variation of the flexible budgets mentioned above, except that the latter are virtually infinitely variable instead of being limited to a few alternatives.

Another means of obtaining budget flexibility has been referred to as the "supplemental monthly budget plan." [6] Under this plan a six-month or year budget is prepared for the primary purpose of outlining the framework of the company's plans, coordinating them among departments, and establishing stiff objectives for each department. This budget is, in a sense, a basic or minimum budget. Then, a supplementary budget is prepared each month on the basis of the volume of business forecast for that month. This supplementary budget is used to give each manager the authority for scheduling output and spending funds above the basic budget if and to the extent that the shorter term plans justify. One advantage of this plan is that it gives management the advantages of close control, while at the same time giving the department managers a minimum level of operations for which to plan on a long-term basis. It also avoids some of the detailed calculations necessary under the typical flexible budget.

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[6] J. B. Heckert, *Business Budgeting and Control* (New York: The Ronald Press Company, 1946), pp. 76–77.

Making budgetary control work. In fact, if budgetary controls are to work well, no manager can lose sight of the fact that they are designed only to be tools of management and not to replace management. Like any tools, they have limitations and must be tailored to the job to be done.

In order to be most effective, however, budget making and administration must receive the wholehearted support of the top managers of the business. To decree that there shall be established an office of budget administrator and then forget about him is certain to lead to haphazard budget making and to saddling lower managers with another procedure or set of papers to prepare. But where budgets represent soundly and thoroughly considered plans, where enough flexibility is provided so that managers will not be strait-jacketed, and where managers are held strictly accountable for performance under budgets, they can be an effective help in management.

Another important means of making budgets work is to be sure that those who are expected to administer and live under budgets have a part in their preparation. Just as wide organizational participation is advisable for developing loyal acceptance of plans, as well as for making certain that plans are understood and workable, just so budget making, being planning, will the better succeed if department managers have a part in preparing their own budgets. While these managers must often be overruled and some of their budget requests not honored, they should be informed why and how their own budget, as approved, best serves the objectives of the enterprise. It should be emphasized that real participation in the budget-making process, and not pseudo participation is necessary. As one student of the problem found out, most budget administrators and controllers recognize that participation is crucial to budget success, but too often what is meant in practice is pressured "acceptance." [7]

Important, too, for successful budgeting is taking care that budgets are not overdone to the extent that the authority of managers will be seriously compromised. While budgets do furnish a means whereby authority can be delegated without loss of control, there is ever a danger that they will be so detailed and so inflexible that little real authority to manage is, in fact, delegated. Some executives even believe that the best budget to give a manager is one that lumps all his allowable expenditures for a period of time into a single amount and then provides for him complete freedom as to how these funds are to be spent in pursuance of the company's goals. This kind of decentralization has much to commend it, although better planning and control may be forthcoming, without centralizing authority unduly, by giving the department manager real authority for participating in the budget-making process. It may also be well to allow the department manager a reasonable degree of latitude in changing his budget and in shifting funds so long as he meets his *total* budget for expenses and product performance.

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[7] Chris Argyris, "Human Problems with Budgets," *Harvard Business Review*, vol. 31, no. 1, p. 108 (January, 1953).

Budget operations are also helped by giving the manager technical assistance in making budgets and in administering them. Statistical assistance, help in developing standards, and accounting-data availability are several of the means where the budget administrator or the controller can help the department manager. Moreover, if budgets are to be the most effective control devices, the manager needs ready information as to actual and forecast performance under budgets by *his* department. These budget reports, or the furnishing of needed data, so that a manager may see how well he is doing, preferably before the fact, are often not available to the manager until it is too late for him to avoid budget deviations.

Nonbudgetary Control Devices

There are, of course, many devices for effective control that do not fall into the class of budgets, although some may be related to and used with budgetary controls. Among the more important of these are presentation of statistical data, special reports and analyses, analysis of break-even points, internal audit, and personal observation.

Presentation of statistical data. Statistical analysis of the innumerable aspects of a business operation and the clear presentation of statistical data, whether of a historical or forecast nature, are, of course, significant tools of control. Some managers can look over statistical data displayed in a tabular form and interpret and understand them. But most managers see better what the data tell by having them presented in some manner on charts. Comprehensible presentation of statistical data, whether in a tabular form or on charts, is an art that requires imagination.

An increasing number of companies are making control data available to managers through the preparation of charts. One of the oldest and best-known chart systems is that of the du Pont Company. With its many divisions and subsidiary interests, the complexity of its operations and the diversity of its product lines, the top management of this company has found that it can best gain a picture of the company, its plans, and results through charts. The executive committee, which is the top management of du Pont, meets one day each week. During the course of these meetings some 350 individual charts are reviewed and studied in small groups, so that in a year's time all the charts have been reviewed several times. The primary control standard of the du Pont Company is return on investment, and the central theme around which each chart is developed for each division is gross profit on sales and sales turnover (sales divided by investment). Thus, the management is able to see, in terms of their primary control standard, how each division is performing.[8]

Special reports and analyses. For control purposes, there is no substitute for special reports and analyses devoted to particular problem areas. No manager can effectively manage unless he has adequate information for the purpose. While routine accounting and statistical reports furnish a good share of this information, there are often many areas where these regular reports do not furnish adequate information. One successful manager of a complicated operation hired a small staff of trained analysts and gave them no special assignment other than investigating and analyzing operations under his control. This small group developed a surprising sense for detecting situations where things did not seem right. Almost invariably, their investigaton of these apparently unusual situations disclosed opportunities for cost improvement or better utilization of capital that no budget or statistical chart would have disclosed.

In fact, it may be that some of the funds being spent for elaborate budgetary control programs could be more profitably spent in these special analyses. Their very nonroutine nature can high-light the unusual and in so doing reveal places for material improvement in enterprise efficiency. In the more routine search for pennies and accounting for them, opportunities for saving dollars are overlooked. Effective management requires constant searching out of exceptions, the strategic points, the limiting factors.

Break-even point analysis. One of the interesting tools of control about which there has been much discussion and attention in recent years is the break-even chart and analysis. This chart merely depicts the relationship of sales and expenses in such a way as to show at what volume the revenues exactly cover expenses. At any lesser volume, the company would suffer a loss and, at a greater volume, would enjoy a profit. Figure 22 shows a simple form of such a chart.

This chart shows the level of revenues and expenses for each volume of sales and indicates that at 17 million of sales the company would break even. As may be readily understood, the break-even point can be expressed in terms of units of goods sold, in per cent of plant utilized, or in any similar factor. The essential purpose of the analysis is to deter-

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[8] For a description of the du Pont chart system, see *How the Dupont Organization Appraises Its Performance*, Financial Management Series, No. 94 (New York: American Management Association, 1950). See discussion of this system of control in Chap. 29.

BE = R − (F + V)

Total Cost = F + V

mine at what point, for a given plant or kind of operations, the company will break even on expenses. It will be noted that the chart is similar to that already presented in connection with flexible budgets, and break-even analysis is often confused with these budgets. While it is true that both use the same kind of basic input-output data, the flexible budget has as its purpose the control of cost, while the break-even chart has as its primary purpose the prediction of profit. Moreover, being utilized for purposes of budgetary control, the flexible budget must necessarily reflect organizational units, while the break-even chart is useful primarily in determining profitability of a given course of action, as compared with alternatives.

Study this chart

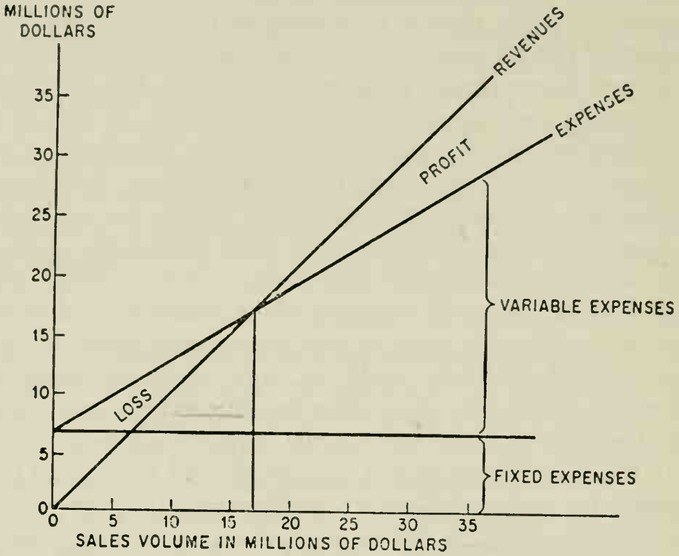

Fig. 22. Break-even chart.

The break-even concept is especially useful for planning and control because of its emphasis on the marginal concept. Ratios, such as the percentage of profits to sales, tend to overlook the impact of fixed costs, while the utilization of break-even points emphasizes the effects of additional sales on profits. Likewise, because it dramatizes the effect of additional expenses or incremental changes in volume, it serves a useful purpose in bringing to the manager's attention the marginal results of his decisions.

Internal audit. Another effective tool of managerial control is the internal audit. Internal auditing, in its broadest sense, is the regular and independent appraisal, by a staff of internal auditors, of the accounting, financial, and other operations of a business. While often limited to the auditing of accounts, in its most useful aspect internal auditing involves the appraisal of operations generally, weighing actual results in the light of planned results. Thus, the internal auditors, in addition to assuring themselves that accounts properly reflect the facts, might also appraise policies, procedures, use of authority, quality of management, effectiveness of methods, and other phases of operations. While it is true that most internal auditors limit themselves to matters of the integrity of accounts and the corporate assets, there is no reason why the concept of internal auditing should not be broadened in practice. Perhaps the only limiting factor is the ability of a company to afford so broad an audit and the very practical consideration that no one likes to be reported or spied upon. While persons responsible for accounts and for the safeguarding of company assets have learned to accept audit, those who are responsible for far more valuable things—the execution of the plans, policies, and procedures of a company—have not so readily learned to accept the idea of being audited.

Personal observation. In any preoccupation with the devices of managerial control, one should never overlook the importance of control through personal observation. Budgets, charts, reports, ratios, auditors' reports, and other devices of control can be helpful, if not essential to control. But the manager who relies on these devices and sits, so to speak, in a soundproof control room reading dials and manipulating levers, can hardly expect to do a thorough job of control. Management is, after all, getting things done through *people*, and, while many scientific devices aid in making sure that people are doing that which the manager has hoped and planned for them, the problem of control is still one of human relations.

Selected References

A Program of Financial Planning and Controls: The Monsanto Chemical Company, Financial Management Series, No. 103. New York: American Management Association, 1953.

Argyris, C., "Human Problems with Budgets," *Harvard Business Review*, vol. 31, no. 1, pp. 97–110 (January–February, 1953).

Dean, J., "Methods and Potentialities of Break-even Analysis," *The Australian Accountant*, vol. 21, nos. 10–11 (October and November, 1951).

Financial Controls and Breakeven Points, Financial Management Series, No. 91. New York: American Management Association, 1948.

Foulke, R. A., *Technical Guides for Healthy Business Management*. New York: Dun & Bradstreet, Inc., 1951.

Goetz, B. E., *Management Planning and Control*, Chaps. 5, 10, 11. New York: McGraw-Hill Book Company, Inc., 1949.

Heckert, J. B., *Business Budgeting and Control*. New York: The Ronald Press Company, 1946.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control*, Part C. New York: McGraw-Hill Book Company, Inc., 1951.

How the Dupont Organization Appraises Its Performance, Financial Management Series, No. 94. New York: American Management Association, 1950.

Lamperti, F. A., and J. B. Thurston, *Internal Auditing for Management*. New York: Prentice-Hall, Inc., 1953.

Lasser, J. K., *et al.*, *J. K. Lasser's Executive Course in Profitable Business Management*, Part 16, "How to Use Budgets for Control of a Business," and Part 17, "How to Design Systems for Internal Control of a Business." New York: McGraw-Hill Book Company, Inc., 1952.

Newman, W. H., *Administrative Action*, Chaps. 23–24. New York: Prentice-Hall, Inc., 1951.

Practical Uses of Break-even and Budget Controls, Production Series, No. 186. New York: American Management Association, 1949.

Reports to Top Management for Effective Planning and Control. New York: American Management Association, 1953.

Techniques and Data for Planning Financial Policy, Financial Management Series, No. 102. New York: American Management Association, 1952.

26

CONTROL AREAS: MANAGEMENT OF PERSONNEL

The controls employed in the operation of enterprises literally number in the thousands. They all embody standards of performance and their application by people for the purpose of discovering, for corrective reasons, instances where resources in all forms are misapplied or misused.

It is not the purpose of this and the following chapters to evaluate the various individual controls employed in enterprises. However, there are significant control areas of general interest that may be considered. Those selected present challenging issues concerning the need for control and the best available methods of achieving it. These issues arise because the data for establishing objective controls may be unavailable or impossible to acquire, the evaluations may be subjective, or the qualities, particularly of people, may be unknown. It is in these areas that enterprises experience the most trouble, where validations of techniques are often missing and where neglect may be characteristic.

The classification of control areas presents a difficult problem. The grouping finally chosen comprises the control over people, control over the product, and control over finance. The latter two areas are fairly well defined by their titles. The controls used in the management of people concern the various devices and techniques employed in order to get people to function in a desired manner.

Control over Organization Structure

Control over the organization structure is essential if it is to be respected in practice or modified to suit changing conditions. The point has been emphasized earlier that the organization structure is merely a tool to effect coordination of activities at the desired points. Unless it is permitted to exist as planned or changed to facilitate dealing with new circumstances, the managerial function of organization is eclipsed.

The need for organization planning. Tools are devices for accomplishing other purposes, and organization is a tool to achieve enterprise objectives. We have already seen how important it is that activities be grouped according to principles and related in such a way as to facilitate the realization of specific goals. Presumably there is a best way to organize, and it is a function of planning to discover and create the proper structure.

The absence of appropriate planning often accounts for continuous reorganization in some firms.[1] Many enterprises are unable to keep their charts up to date because changes occur faster than forms can be printed. While this factor may be due to necessary or planned changes in organization, it is more often evidence of lack of planning or, perhaps, the taking of action before adequate planning could come to fruition.

Comparison of actual with ideal organization. The development of an ideal organization chart of an enterprise has many advantages. It points up the condition that the managers hope to achieve as soon as possible. It offers a guide to all intermediate changes, making certain that they are made in such a way as to facilitate the realization of the ideal. It requires the manager to plan the eventual structure with great care, and it is an important control on organization change.

The comparison of the actual structure with the ideal enables a manager to assess quickly the merits of any proposed modification. Since it is a characteristic of divisional and departmental managers to change their structures to suit personal purposes, the superior manager has a ready guide to indicate whether approval will be given. This saves an immense amount of time because the future organization plan does not have to be rethought in each instance.

Organization manual as a control device. The organization manual will contain not only the structural charts of the whole enterprise and its parts but also summary statements of the assigned duties and the delegated authority of every manager. It is a monumental and expensive task to develop and maintain such a manual. But it can have important advantages. Individual managers are less prone to seize the functions of others and to build up personal empires. The manual is a ready means of settling jurisdictional disputes. The successive editions mark the milestones by which the ideal structure is approached.

Review and approval of organization changes. The need for opportunities to make desired changes in the organizational structure rests in the dangers of inflexibility. Enterprises and their managers should not be hampered in their efforts to meet new conditions by any slavish adherence to a chart. On the other hand, complete freedom to make immediate changes tends to lead to chaos. Consequently, it is important to provide for regular review of the structure. This can be formalized in a procedure so that managers may know how to go about requesting a change. Such a plan would imply that specialized personnel are available to make a study of change requests, so that they may be disposed of quickly. A long-pending change adversely affects morale more than change itself. Hence, effective control of organization structures requires not only a formal method for requesting study and recommendation but also skilled personnel who can give this matter the attention it deserves.

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[1] See A. Brown, *Organization of Industry* (New York: Prentice-Hall, Inc., 1947), pp. 340–346, for an excellent summary of the reasons for organizational changes.

Even in firms that cannot afford a specialized staff for organization planning and review, it is necessary that these functions of control be recognized and undertaken. In some cases, it must necessarily be the task of the chief executive or the top-management group. In other cases, the use of outside management consultants may be helpful.

However, in any organization planning and control, it is ever important to recognize that, to the extent consistent with enterprise objectives, each manager should be given the widest possible latitude in determining the most effective organization of his department. One should not lose sight of the fact that every manager must be given authority before he can be held responsible for results and that this authority must include the power to organize his department unless, in so doing, he causes disproportionate disturbance to others. Since organizational arrangements are designed to obtain coordination both horizontally and vertically, it may not be possible to give every individual manager complete freedom to organize his own department.

Control of Policies

Policies, as we have seen, are broad guides to the acting and thinking of enterprise colleagues and subordinates. They are not guides in the sense that they state specifically how something will be done, when, or by whom. Such is the function of a procedure. Rather, policy channels the thinking of managers. For example, a firm may adopt a policy of never suing a customer. Such a determination does not specify what shall be done. It leaves action, which may take the form of carefully prescreening risks or working out a program for repayment, up to the ingenuity of the affected managers.

Control involves the determination that the complex of policies is in the best interests of the firm and that they are being followed. The latter is related to the issues of conformity and interpretation; the former raises issues of policy evaluation.

Communication of policy. To secure conformity and consistency in interpretation requires a common understanding. This, in turn, depends upon the effectiveness of communication. Historically, there has been a long tradition of unwritten policy. On the one hand, executives tended to believe that they could remember what a policy was, largely because they could recall the circumstances of its determination. This belief was often reasonable when most enterprises were small and turnover in managers rare. Even today many managers hesitate to write down policies because they are uncertain of the wisdom of adopting a given guide, fear inflexibility, or cannot find the formulation that will carry a firm through dynamic changes.

Nevertheless, sheer size of enterprise and the conviction of many managers that broad guides ought to be written have tended to result in a growing body of written policies. There are, indeed, certain advantages to be reaped from this practice. It is the best means of achieving uniform adherence, both because the written word tends to enhance clarity and definiteness and because it has a reference value. These factors inevitably result in a maximum of consistency, plant-wide applicability, and continuity of practice.

It is important to underscore the probability, rather than the certainty, that these advantages will be realized. Experienced managers know full well how easy it is to overrate them. For instance, a firm may adopt a written policy to compete on a price basis. It is simple to write this down and publicize it throughout the firm. Its interpretation is quite another matter. Competition on this basis is an exceedingly complex matter that cannot be spelled out for all to follow. Attempts to do so would make the policy quite inflexible. Hence, firms may reduce policy to writing, but they will not attempt to treat similarly its interpretations.

Detecting policy failures. The implementation of policies in enterprise operations has such a profound effect upon the achievement of goals that the matter of detecting failure is of first-rate importance. The means of doing this may be roughly grouped into three categories. The first concerns the number of appeals for modifications. These originate among subordinate personnel who are close to the actual work of production, selling, or pricing and who, therefore, are probably the first to become aware that a given policy is resulting in expensive red tape, inefficient production, or loss of sales. Their normal practice is to appeal to their superiors for an exception or a modification of policy. A small number of such appeals is normal in any business, but if requests become repetitive, they may reflect a policy failure.

A second means of discovering errors is the existence of evidence of conflict between policy and the rules and regulations of society. In such situations the firm is brought quickly to realize that particular policies are in conflict with broader social objectives. For instance, an advertising policy may be found to conflict with the standards of truthfulness enforced by the Better Business Bureau and the Federal Trade Commission.

A third means of detecting policy failures is the discovery of a steadily deteriorating competitive position. Reports of relative standing in the industry, of exhaustion of assets in the competitive struggle, and similar evidence are not, of themselves, sufficiently accurate to point the finger to poor policy. They may as well point to poor execution, poor organization, or other causes. But if examined closely, the source of the trouble may turn out to be faulty policies.

Policy control. Control of policy[2] can be effected in several ways. One of the most important is to make certain that the managers who are to observe policies have an important part in their formulation. This is, of course, a rudimentary safeguard that has received repeated emphasis. Men who have had a part in determining what policies should be have an important stake in seeing that they work well.

Another important force in maintaining policy observance is publicity. If superior managers are certain enough about the soundness of a policy to reduce it to writing, they can go far toward achieving conformity by making the policy widely known. Anyone who may be tempted to ignore or violate it would then have to face the criticism of subordinates and colleagues as well as the disciplinary action of superiors.

Perhaps the best test of the accuracy with which policies are followed is to measure their operation in terms of results. If an accounting policy requires costs to be expeditiously reported and transmitted to managers needing them, the effectiveness of this policy can be determined by ascertaining whether the results desired are being attained. If an industrial relations policy is to maintain harmony in labor-management relations and to avoid extended disputes, review of grievance files will often disclose the success of the policy. Or, if a company has a policy of assuring complete customer satisfaction, examination of customer complaints and practices in returning goods will often reveal evidence of the efficacy of the policy.

The danger of inflexibility requires that policies be reviewed periodically. Industries are subject to varying dynamic forces. Perhaps insurance firms, banks, and public utilities are examples of enterprise types where policies need not often be reviewed. On the other hand, firms that are subject to intense competition, experience the full force of innovation, or are closely tied up with the strategy of political events will consider frequent review a vital activity. The function of review is not necessarily to change. Rather it is to reconsider the advisability of existing policies. The eventual decision may be simply reaffirmation. But it may also be modification, deletion, and the initiation of new policies.

CONTROL OVER PROCEDURES

Procedures have been defined by one authority as the "means by which all repetitive business action is initiated, carried forward, controlled, and stopped."[3] They specify who, how, and when individuals act. Hence, if they are properly conceived, they will trace out the most efficient method of getting repetitive activities done, consistent with the values placed upon environmental factors by the chief executive and his advisers. The latter qualification is an important one, particularly in business enterprise, where external forces such as competition, tax regulations, or labor policy, may compel a firm to adopt uneconomic practices.

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[2] Cf. P. E. Holden, L. S. Fish, and H. L. Smith, *Top-management Organization and Control* (New York: McGraw-Hill Book Company, Inc., 1951), pp. 80–83; and *Management News*, vol. 26, no. 7, pp. 5–6 (July, 1953).

The necessity for developing procedures carefully has been widely recognized for some time. Indeed, Fayol, writing early in the twentieth century laid upon the executive the duty to "fight against excess of regulations, red tape and paper control."[4] Procedures became important in the operation of enterprise at the time that firms grew to sizes much too large for personal control. But like many good things, procedures are subject to certain dangers. Misunderstood purposes and improper methods of prescribing, publishing, and keeping them up to date undoubtedly are responsible for the conclusion of Fayol and others that procedures can be deleterious to good management.

Problems created by procedures. The immediate sources of the problems encountered in the operation of procedures lie in their complexity, obsolescence, duplication, and inflexibility. Fundamentally, however, these surface dangers are themselves occasioned either by forces external to these standard practices or by poor management.

Undue Complexity. This danger is due, not to any pernicious fault of the procedures themselves, but to faults in the organization structure. Any procedure can become exceedingly complicated if the enterprise in question is overorganized, if delegation of authority and assignment of duties are unclear, if the firm is either overcentralized or undercentralized, or if personal preferences of department managers are permitted to outweigh gains from standardization. The fractionation of work, particularly at the lower levels of the organization structure, is often permitted either for empire-building purposes or for rewarding favored subordinates. In either event, it is bound to result in underemployed supervisors and in numerous records designed to control paper work as it passes from one section to another. Thus, the violation of sound organization principles is often interpreted as overcomplexity of procedures.

Undue complexity is also inevitable if there is a lack of clarity in the delegation of authority or work assignment. There is a dual danger from this fault. It may result in duplication in order to make certain that the work gets done, or it may result in no one's doing anything because everyone thought it was another's job. Similarly, undue centralization of authority may result in many persons' handling a paper as it is sent upward for an approved signature. The armed forces are not the only organizations that suffer from this error.

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[3] R. F. Neuschel, *Streamlining Business Procedures* (New York: McGraw-Hill Book Company, Inc., 1950), p. 6.

[4] H. Fayol, *General and Industrial Management* (New York: Pitman Publishing Corporation, 1949), p. 54.

Sometimes undue complexity creeps into a procedure because the managers of different departments insist upon handling paper in their own way. They may be quite sincere in thinking that their method is best; they may simply be stubborn; or they may take this means of showing that they are above the authority of a standard practice.

The problems of complexity are also often accentuated where procedures become obsolete. Where new problems and processes demand new procedures and established procedures are not eliminated or modified, the piling up of obsolete practices leads to an undue degree of complexity.

Obsolescence. Procedures become obsolete either because they are not kept up to date or because the failure to police them has resulted in numerous deviations from standard practice. Change is an important force in nearly all enterprises. As far as procedures are concerned, the types of change that are important are those due to growth and to reorganization of the firm. Growth must be recognized in a procedure because it often means that expansion of the labor force, turnover in personnel, and increase in plants and markets require the modification of a standard practice. The increase in the number of similar reports calls for their accumulation and summary. Increasing numbers of persons means that even within the firm, individuals do business with strangers who have diverse ideas about how things should be done.

Procedures have a way of becoming customs. Methods of handling operations in an enterprise tend to become ingrained in departments and individuals, with the result that a stubborn resistance to change develops. Either old procedures are not changed at all, or new procedures designed to meet the requirements of new programs are superimposed on the old. The result in the typical business, government, or other enterprise is many obsolete ways of doing things, which are not always easy to eliminate. One of the large defense plants found in 1947 that it had shrunk in size by almost 90 per cent from 1945 and that for this and other reasons there was no longer a need for the highly complex system of procedures. Yet, despite obvious obsolescence, it took several years of concerted effort on the part of procedures experts and top managers to eradicate those no longer required by the much smaller and simpler operation.

Duplication. Procedures that, in themselves, are models of efficient handling of information can also duplicate one another. This possibility is explained by the various procedures and controls upon which managers insist. If individual department heads require copying or posting data, if they insist on a report of an activity of concern to others, if through lack of trust they make up a record to duplicate those made in other divisions, procedures will be duplicated. Managers who are responsible for such practices feel that they are not getting information accurately or on time, and they fear that they will lose control through deficiencies in others.

Duplication is a very elusive problem. It rarely takes the form of direct, complete, and clear overlap of activity. Rather, it is usually partial and uses different forms and records concerning the same subject matter. Special training and ability are therefore necessary to detect and remove such duplications.

Inflexibility. Since standard practices are by nature inflexible, they must always suffer from this fault. In times of crises managers may prefer to ignore procedures, and oftentimes it is sound business to do so. Sometimes it is the strategic thing for a president to make a purchase or a sale without conforming to the appropriate standard procedure. But the danger of introducing flexibility by such means is that the whole course of business operations will soon be conducted in response to crises. By definition, following a procedure should be the most efficient way to accomplish a normal purpose. And yet managers who are averse to following procedures often insist that their short-cut methods are justified because they are faster. They sometimes choose this excuse to divest themselves of the checks and balances to which they are subject in the original delegation of authority.

Control of procedures. There are two requirements for the control of procedures. There must first exist, on the part of the general officers of the enterprise, a determination that the firm will operate on standard practices. The logic of standard practice is extremely forceful: it should be the most efficient way of handling recurring activities. However, standard practices seem to conflict with the basic desire of people to do things *their* way. Admirable as this characteristic may be in some areas of human effort, in associative activity it results in chaos. Only the power and prestige of general officers are capable of subjugating this individualistic drive.

The second requirement concerns the qualifications of those who devise procedures. The personal and technical qualities needed are unusually demanding. Many companies meet this requirement by establishing a procedures staff. The personnel involved are usually confined to an advisory role. They need skill in getting along with others, many of whom will be extremely hostile to their work. They also need wide experience in recognizing the faults of existing practices and especially their causes.

Procedure Manuals. Manuals are an excellent control device, for they are an essential means of making official procedures known, provide easy reference, and are a means of settling disputes. All enterprises have procedures. Some are unwritten; others are contained in nondescript memos, letters, and notices; and, to an increasing extent, many are formalized, standardized, and circulated in a predetermined, logical manner. The first two practices are dangerous for medium- and large-scale firms to follow, since it is not possible to make certain that unwritten procedures are known and understood and since the haphazard treatment of written standard practices encourages their neglect. If care is taken not to overformalize and overdevelop procedures, their presentation in a standard manner will encourage the affected personnel to study them.

But the standardized method of publishing procedures is not a guarantee that they will be followed. The technique of writing, the method of grouping personnel for circulation purposes and appropriate indexing are important matters in persuading managers to *refer* to them. Ease of reference is as important in getting people to follow a standard practice as writing them in the first place. Moreover, even the best-written manual may be ineffective unless means are found for making sure that new procedures are properly inserted and obsolete procedures removed. In some companies, these manuals are periodically and individually checked with the objective of accuracy in mind.

Finally, the standardized written procedure is an effective means of settling jurisdictional disputes. Arguments about the right way to accomplish an activity or to initiate a proposal are essentially sterile. Most people are paid for getting things done rather than for discussing how they should be done. The formulation of procedures is the duty of appropriate managers, normally, especially in large companies, with the assistance of staff specialists on procedures.

Provisions for Review. By their very nature, procedures cannot be partly out of date. Rather than permit such a situation to arise, one must constantly review all procedures. Periodic review will not do, for it would permit the intrusion of elements of inapplicability that would destroy the operation of standard practices. Hence, a sound control device is to make it easy for interested personnel to request a review, have a procedures staff organized in such a way as to make an analysis of requests without delay, and provide a system of immediate issuance of modifications upon line approval. Only by such means can obsolescence be discovered and eliminated.

An important phase of control is the centralization of authority to recommend procedural changes and to order new forms.[5] Unless this is

[5] Cf. C. O'Donnell, "Control of Business Forms," *Journal of Business*, vol. 19, no. 3 (July, 1946).

done, the department anticipating a change may proceed to order forms, only to discover that they are inappropriate for the recognized needs of all concerned.

Policing Procedures. Anyone who has had practical experience in the development and operation of procedures will recognize the frustrations encountered in achieving adherence to standard practices. The typical procedures staff has no authority to command others to follow a given practice, and those who do have such authority are reluctant to use it. Consequently, policing depends upon getting the interest and full support of general officers, patiently showing individual managers how they will benefit from following standard practices, and placing in the procedure itself a control to ensure that nothing will be done unless standard practices are followed.

The full and active support of general officers cannot be overemphasized if procedures are to be made effective. The authors have seen enterprise officers give lip service and general support to the *idea* of having standard practices but fail at the critical moment to support a procedures staff in its efforts to secure cooperation from powerful divisional executives. The bad example of a key recalcitrant will ruin all efforts to enforce standard practices.

In handling individuals of this nature, even the command of a superior is really inappropriate. Rather, the conversion of the recalcitrant must be spiritual. He needs to be shown convincingly how he will gain from following the desired path. This may be done by pointing out the time loss in following personal methods rather than official practice or by showing him how he can gain the cooperation of others if he follows the standard practice of getting their approval of his plans.

Sometimes procedures can be effectively policed by providing a central point through which requisitions, purchase proposals, hiring proposals, and similar matters must be cleared in order to receive consideration. If, for example, all requests for merit increases for subordinates must be cleared through the office of the salary administrator, the procedure for initiating and securing merit increases will be effectively controlled.

Internal Auditing of Procedures. The purpose of auditing existing procedures is to determine whether they are needed, and whether they achieve their purpose of streamlining practices in handling repetitive activities. A procedures staff can often get into considerable trouble by promulgating standard practices over activities where no need or advantage is discernible. Such undesirable practices can easily be discovered by an internal audit.

The other problem for the internal audit group concerns the measure of success a procedure has achieved. Sometimes cost figures are available, such as the cost incurred before and after a given procedure is established. Sometimes the advantage can be calculated in terms of hours saved, reduction in returned goods, or economy in travel time. Unmeasurable but significant advantages can be accumulated from the experience of personnel. Their opinion about the economies achieved through a new procedure can often be decisive evidence.

Control of Research and Development Personnel

The activity of research and development is merely one of many undertaken by an enterprise, but it has certain unusual characteristics that require particular attention. Programs in this area have expanded very rapidly in the last ten years, and it is a rare firm indeed that does not encounter difficulties in their control. There are two important factors that tend to differentiate the control of research and development from other activities. The first concerns the personnel involved. While it is true that all programs require people to carry them out, the persons involved in research are so different in training and in techniques employed as to require special consideration. The differences between foremen and physicists are examples. Secondly, the planning data that lead to the adoption of a research and development program are largely composed of subjective judgments rather than objective, measurable factors. As a consequence, they do not provide the standards that are inherent in sales, manufacturing, or some personnel programs. As a matter of fact, the peculiar problems of control in the area of research and development arise out of two conflicting principles, succinctly stated by R. N. Anthony: "(1) 'research workers must have freedom' and (2) 'management must manage.' "[6]

Critical aspects of research and development programs. The need for control arises from the necessity to make certain that research and development work contributes its predetermined share to the realization of the enterprise objective and that scarce skills are used economically. Perhaps no other type of program is in such danger of getting off the track. The intellectual interests and the imagination of research personnel are constant threats to any program because men cannot be stopped from thinking about problems that are technically beyond the scope of the original program. There is an ever-present danger that the tail of research will wag the dog of production.

The second need for control arises because it is difficult to draw clearly the line between research and nonresearch functions. A similar problem arises in the employment of good engineers in the closely associated work of drafting, selling, or even wage negotiations. Hence, there is a demonstrable need to make as certain as possible that researchers confine their efforts to research and avoid ancillary activities.

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[6] R. N. Anthony, *Management Controls in Industrial Research Organizations* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1952), p. 15.

Means of control. Enterprises which have research and development divisions or which offer research service to others as their main purpose have quite unique control problems because of inexperience and because tight control appears to defeat itself. Managers who have had considerable experience in developing techniques to flag serious deviations from desired activities tend to rely upon the research budget, time schedules, and status reports.

Research and Development Budget. The adoption of sales and expense budgets in firms whose chief objective is the sale of research and development skill is not significantly different from the budgetary processes of any other type of enterprise. Such is not the case, however, for a firm in which research is merely an auxiliary function. In this situation, it is the operating divisions that bear the expense of research, and it is necessarily a top-management decision to determine how much money is to be spent in this way. Once this figure is determined, the director of research normally proceeds to allocate the total among the projects submitted by the operating divisions and among those deemed essential by the director himself. For the latter purpose as much as a quarter or a third of the total budget should be under the full control of the director. This practice gives flexibility to research, permits exploratory work, and allows for effort to be devoted to projects in which the operating divisions are not as yet directly concerned.

Time Schedules. The use of time schedules as a control device is extremely touchy. Technical men tend to object strenuously to them on the ground that such forecasts are not only wild guesses but that managers tend to use them as standards for control purposes. Admittedly, there is considerable merit in these objections. But technical men overlook the responsibility of managers in this connection. It is apparent that extraordinary care needs to be taken so that both parties thoroughly understand these schedules.

If this meeting of minds can be accomplished, the employment of time schedules for projects is a desirable thing. By its very nature it will require a very careful study of all aspects of a project, breaking it down into its several parts and developing a much clearer idea of what needs to be done. Then, on the basis of past experience, a more refined forecast can be made. However, the point should not be overlooked that such schedules will certainly have to be modified, perhaps several times, in the course of completing the assignment.

Status Reports. Status reports are essential for the control of research activities. Firms vary considerably in the frequency with which they are demanded and in the information to be included. Some require reports daily and weekly, and others are satisfied with semiannual reporting. Any fixed time has its drawbacks, for it ignores the value of reporting on a "stage" basis. Perhaps the best practice is to require reports approximately each month but leave the exact time to the technical expert so that he can select the logical point.

In order to guard against the waste of valuable time in writing reports, one must see that they are limited to a brief summary of work accomplished to date and the action to be undertaken in the immediate future. Only the report on a completed project should contain all the scientific data, the record of failures, and the statement of related areas for future projects.

Control of Nontechnical Activities of Research and Development Departments. In the operation of any research laboratory managers can keep a close check on the output of nonprofessional personnel and on functions of a nontechnical nature. The means of doing this are no different from the controls established in other departments over similar functions. But managers reflect a peculiar attitude toward these matters when a research department is concerned. They rarely attain a mature view but lean to the extremes of no control at all or very close control. The former can be dangerous to the financial security of the firm, and the latter can often stifle the best work of professional technical people.

The extent to which research laboratories employ nonprofessional personnel has been reported by R. N. Anthony.[7] In a survey of 204 laboratories ranging in size from small to giant, the nonprofessional technical employees accounted for approximately half the total. The nonprofessional employee is used for such activities as clerical work, purchasing, receiving, storing, accounting, library care, and maintenance. Enterprise managers have had abundant experience in controlling such functions, and they should apply the same standards to them whether they are undertaken in a research department or in other divisions.

Staff and Service Functions

The control of staff and service functions in an enterprise is nearly as elusive as the control of research activities. Certain types of staff work require the use of professional personnel whose attitude toward control is that typical among professional technical people. Furthermore, some staff functions can be as nebulous as physical research projects. Nevertheless, these are merely challenges to the skill of the manager.

Need for control. The need for giving particular attention to the problems of control in these areas arises from the lack of standards concerning what staff and service functions should be undertaken and the way they should be charged to the operating departments. The fact was pointed out earlier that the basis for deciding what staff or service facilities should be offered often rests less on their productivity than on the profit position of the firm. Consequently, the size of the expense budget is likely to be a resultant of this factor, past appropriations, and competitive practices, none of them satisfactory. And the general practice of throwing the cost of these functions into a general overhead account leaves the operating departments singularly quiescent in the face of their rising costs.

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[7] *Ibid.*, p. 457.

Control techniques. The techniques to be considered here do not include the normal standards that firms apply to such activities as clerical work and accounting. Rather, attention is directed to the controls that are peculiar to the nature of staff and service departments. These include the expense budget, cost standards, and industry averages.

Expense Budget. The expense budget of the individual service or staff unit is developed on the bases of past service and expense, and the modifications attendant upon the degree of expansion or contraction envisaged for the ensuing fiscal period. The final determination of the total figure is made by the division managers who will use the service in question, the service department head, and the chairman of the budget committee.

Once this matter has been settled, the service manager selects the projects or functions to be accomplished, and budgets personnel, overhead, equipment, and other items for each. These become the standards against which performance is measured.

Service Charge. The method of accounting for the cost of staff and service activities can have an important effect on the quality of control exercised over them. If the expense of such services is merely treated as burden, without reference to the departments or division benefited, there is a strong tendency for managers of the latter to feel no responsibility for this type of expense. On the other hand, if the departments using such services are billed directly on a project or use basis, the effectiveness of control will be immeasurably improved.

In many cases such a practice may be either uneconomic or inappropriate. Since the service performed by personnel and accounting departments is rarely on a project basis, it would clearly be difficult to charge individual departments on the basis of cost of service rendered. Similarly, a group that advises on planning or organization issues may find such a method infeasible. Thus, the question is one of determining whether the firm is receiving its money's worth from accounting, or personnel, or design engineering. The answer to this issue is sometimes sought in work simplification and in intra-industry averages. At the present time there appears to be no other approach.

Intra-industry Averages. Attention is drawn to the possibility of employing industry averages as standards of performance for staff and service departments, not because this is a widely used device, but rather to emphasize its pitfalls. Unquestionably, the failure to use this device is due to nonexistent data rather than to any hesitancy on the part of managers. In those relatively few instances where industry-wide data are available, enterprise managers eagerly study and employ them.[8]

The dangers in the use of such data relate to the comparability of the averages with the costs in the individual firm and the more basic question of whether the data included should be there in the first place. The former issue is quite clear, and few would misunderstand its import. Since the individual firm is unlikely to be doing the same thing in the same way as its competitors, the logic of comparing its costs with the industry average is highly questionable. The second issue is profoundly important. It may be illustrated in this way. A given firm has a budget of $100,000 for the operation of its cafeteria. The average cost of this facility is $125,000. Should the firm be satisfied with its performance? The correct answer may be that the firm should not have a cafeteria!

Control of Personnel

The issues in the control of personnel relate to the fulfillment of the policies and agreements concerning the relationship of the enterprise to its employees. All firms have policies, whether they be written or not, relating to the quality of persons they intend to hire, the motivation of these people, and the spirit in which agreements will be honored. The purpose of control devices is to flag any deviations from such policies, so that corrective measures may be taken.

The need for control. Particular urgency attends to the employment of controls over personnel policies, where the identification of deviations is unusually difficult. There are no engineering drawings to use as standards. The bench marks are quite vague, resting upon foundations in psychology, experience, and justice. But the control *areas* are clear. They are concerned with the quality and motivations of employees.

It is perhaps natural that all firms want to employ proficient personnel. But it is much easier to adopt such a policy than to make certain that it is carried out. After all, what is a proficient person? In many areas the particular skills required can be measured with considerable accuracy. On the basis of education and the nature of experience it is possible to be quite accurate in determining the quality of the skill of chemists, engineers, accountants, clerks, or machinists. On the other hand, the skills of lawyers, treasurers, and managers are quite difficult to measure. In these and similar areas control over the quality of personnel can be quite difficult. The variety of techniques, as has been pointed out in a previous chapter, are endless. This fact can only mean that validations have not yet been made.

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[8] "What Should Maintenance Cost?" *Factory*, vol. 111, no. 1 (January, 1953). Note also the wide use by department-store buyers of the Controller's Congress reports published by the National Retail Dry Goods Association.

The controls over wage and salary administration are quite good because the standards are both available and measurable. But enterprises are not so fortunate in the case of noneconomic kinds of motivation. It is one thing to recognize such areas as status, promotion, and prestige and quite another to establish and implement policies with respect to them. Nevertheless, the importance of these factors cannot be overlooked. Motivation is a whole piece of cloth. The neglect of important elements tends to exaggerate the importance of money and other measurable income and often leads to costly demands for economic rewards to fill the void created by inattention to the full gamut of personal goals.

The growth of trade and industrial unions among nonmanagers has raised many policy questions relating to the implementation of the employment contract. One obvious necessity is to see that the contract is interpreted in one way by all subordinate managers. Another policy matter concerns the treatment of nonunion employees. The enterprise managers must decide whether all employees are to be treated with evenhanded justice or whether the unorganized will be treated better or worse than the organized. And there is the touchy matter of grievance procedure. Enterprises can have policies to anticipate and avoid grievances and policies to settle grievances promptly or permit them to fester. The latter determination probably does not need a control to see that it works, but the first two resolutions require constant checks to make certain that grievances are settled in their early stages by supervisors who understand the techniques.

Techniques of control. The forms and types of reports needed by management for the control of activity are matters that can be worked out by industrial engineers. Of interest here is the kind of information needed for personnel control purposes and the sources for its accumulation.

Quality of Managerial Personnel. The basic control issues concerning the quality of managerial skill are (1) How does the individual manager compare with the ideal? (2) Does the selection and training procedure yield high-quality personnel? The first problem involves the development of a standard that is representative of the excellent, highly proficient, or ideal manager. Normal tools of determination are entirely inadequate for this purpose. The vision of an ideal manager is wholly subjective and therefore personal. Comparisons with reputedly good managers are equally unsatisfactory because the basis for their reputation is unknown. Perhaps all that can be expected of managers is that they keep the firm even or ahead of its competition. Such a view of the matter necessarily calls for over-all controls that leave open entirely the question of individual responsibility for results.

These problems in the establishment of a standard for quality of managers are quite insuperable at this time. Consequently, it is essential to fall back on a list or group of factors that appear to have a positive influence on the way a manager accomplishes his job. These factors have been explained in considerable detail in Chapter 15. They are comprised of intelligence, facility in communication, scientific methodology, good judgment, leadership, an interest in the humanities, and drive, requirements included in the periodic evaluation form suggested in Chapter 16. While subjective measurement in these areas remains an issue of major importance, such an evaluation is, nevertheless, an effective means of verifying the degree to which individual managers measure up to the standards.

The validation of the selection and training procedure is relatively easy to accomplish. On the basis of company experience a factor analysis can be made of the degree in which each element in the selection and training program correlates with the measured strength and weaknesses of the evaluated performance of individual managers. The resulting experience tables may be used for improving the selection and training program. Seeing that personnel conform to the official program becomes then a matter of course.

Motivational Controls. Stress has been laid in preceding chapters upon the variety of motives to which personnel respond. The whole problem of developing policies to take advantage of these motivations in a productive way, of implementing these policies, and making certain that they are followed is extremely complex. Despite general agreement that this is the thing to do, practical applications are almost unknown. Enterprise managers continue to negotiate settlements with subordinates on financial terms proposed by either party. For instance, wage and fringe elements are translated into cents per hour. But cents and dollars may not *really* be what subordinates want. Although they and their superiors fail to realize it, what is really wanted may be a chance to work for an efficiently managed firm or to gain security in retirement, prestige, and personal dignity.

There is a need, therefore, to develop policies that will take these motives into account. Suggested for this purpose are (1) policies to develop and hold skilled managers; (2) policies to recognize and promote subordinates in accordance with objective standards; and (3) policies to improve the status and prestige of subordinates. The implementation of these policies is no easy matter, yet it must be pursued with determination and sincerity. To achieve good management in an enterprise requires the adoption of effective selection and training procedures so that all managerial positions will be held by skilled personnel. The development of confidence in these managers entails the employment of modern and appropriate techniques in an objective manner. For instance, job evaluations can go a long way toward the differentiation of positions in terms of duties and the power to carry them out. This forms the basis for differences in status based upon esteem and salary brackets. Periodic evaluation of performance and the use of man-profile charts provide the best safeguards for objective promotion.

A program of this nature rests upon the basic assumption that it is the superior's job to look after the welfare of his subordinates. Employees who know that their superior will take care of them in terms of salary, promotion, merit increases, and ways to improve their personal prestige may be relied upon to spend their productive powers cooperatively in the accomplishment of objectives desired by the enterprise.

Control over External Relationships

The individual enterprise is not a self-contained associative activity. Its employees have almost continual contact with a variety of persons outside the firm. A maze of complex personal relationships is a normal occurrence as owners, managers, and nonmanagers acquire the factors of production, sell the product, conform to official regulations, and take part in community affairs.

The enterprise as a whole has an important stake in the way these relationships are carried on. Its business reputation depends in large part upon the nature of the contacts made. If the owners take no special pride in the nature of this reputation, the firm may simply ignore the whole matter. But few firms are in a position to do this and, at the same time, safeguard the interests of owners and employees. Consequently, it is most common for enterprises to adopt policies and procedures that will govern their external personal relations.

Control over buying relationships. A well-organized purchasing procedure will implement policies designed to regulate the relationship of employees with outside persons representing sources of the factors of production. The reputation of the firm is involved in the fair treatment of suppliers, in willingness to receive salesmen, in resistance to inventory speculation, and in the management of claims. Every voice in the buying process can affect the reputation of the firm, and it is imperative that superior managers make certain that applicable policies are understood and carried out.

Control over customer relationships. Customer policy is undoubtedly affected by the firm's estimate of its need for satisfying those who buy its products. There may be circumstances where an enterprise has no concern for customer relationships. The firm may have a monopoly, or it may feel that it will pay to take a short-run advantage. In the main, however, few enterprises would accept such a view. They are interested in customer good will so that repeat business will be encouraged. If the firm is a public utility, it may rely on customer satisfaction for help to obtain increases in service rates from regulatory commissions. Such firms will make as certain as possible that its employees are trained to make a good impression on customers, manage the complaint department with dignity and justice, service customers promptly and efficiently, and extend advantages of price and quality whenever available.

Control over government relationships. All enterprises have relationships with persons in various governmental and regulatory bodies. The most common involve obeying the law. Other firms may find it necessary to oppose a legal or political action. There are still other firms that seek government contracts and that deal with foreign governments. In this complex of situations the individual firm is sensitive to the nature of the relationships between its personnel and those of the governmental bodies.

In order to maintain a given relationship, most firms adopt the simple policy of conforming promptly to regulations. Where negotiations, legal action, or the international interests of the nation are concerned, firms control personal relationships by centralizing the authority to deal with governmental bodies in the person of one or a very few top executives. Their reliance is placed in the judgment of trusted officers.

Control over union relations. Control over the personal relationships arising from the necessity of dealing with a union is normally achieved by centralizing the authority to deal with union officers and to interpret the contract and by the formulation of procedures governing grievances. This method of control has its source in union demands for a company-wide contract and in the dangers inherent in permitting managers the right to interpret contract clauses without official guidance. Differences of opinion regarding the interpretation of clauses and variant practices in handling grievances are frequent causes of labor trouble. Basically, the control rests upon the sound judgment of one or two top executives. Unfortunately, centralization results in a great deal of red tape, which can often be a potent source of dispute in its own right. The training of subordinate managers, in whose areas many disputes arise, is probably a better long-run control over grievance procedure. Such a practice would force negotiators for both enterprise and union to think through the implications of their apparent agreement and to write it plainly into the contract. On the other hand, the authority to negotiate a union contract must be centralized.

Control over nonbusiness relationships. In the interests of safeguarding the reputation of the firm, many enterprises have found it necessary to centralize the control over the public utterances and the public activities of employees. The first takes the form of editing proposed speeches, and the second involves specific approval for partaking in public activities. Large-scale firms feel particularly sensitive to what its employees say and do in public. They may divulge secret information, engage in political activity, or be distracted from their duties with appointments to public bodies. Unfavorable publicity can follow from such indiscretions, if only because important men in famous firms are news. For these reasons many firms centralize authority over public relations.

There are several important reasons why this method of control may be dangerous and ineffective. It reflects a lack of trust in subordinates, which, in turn, may be based upon improper training or an authoritarian complex. Neither has a proper place in the operation of our enterprises. A firm will be better served in the long run if it selects and trains its executives properly and then relies upon them to guard closely the good reputation of the firm.

SELECTED REFERENCES

Anthony, R. N., *Management Controls in Industrial Research Organizations,* Chaps. 6–12. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1952.

Brown, A., *Organization of Industry,* Chap. 20. New York: Prentice-Hall, Inc., 1947.

Davis, R. C., *The Fundamentals of Top Management,* Chap. 14. New York: Harper & Brothers, 1951.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control,* Part C, Secs. 2, 4, 5–7, 11, 13. New York: McGraw-Hill Book Company, Inc., 1951.

Lasser, J. K., *et al., J. K. Lasser's Executive Course in Profitable Business Management,* Sec. 13. New York: McGraw-Hill Book Company, Inc., 1952.

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CONTROL AREAS: PRODUCT

Some of the subjects of control may be grouped in an area having to do with the characteristics of a firm's products. As was pointed out in the discussion of policy formulation in Chapter 22, the success of planning in this area probably affects the profitability and stability of the firm more than in any other, since the nature of the product, the means used to produce it effectively, the price at which it is sold, and similar factors largely determine organizational, financial, and other policy considerations of the firm.

Control over Product Line

Product line may denote the products offered for sale by the firm, and it is used in this sense here. However, it should be recognized that product line usually connotes a family of closely related products produced and offered for sale by a company. For example, a firm that manufactures a group of electrical appliances that are sold to ultimate consumers would call its output an electrical appliance line. If it also produces electrical equipment for industrial users, the total output might be divided between a consumer line and an industrial line or between an appliance line and an industrial equipment line.

Purpose of control. The need for control over the product line arises from the need to manage the output of a firm by changing the items in a line and changing the number of lines. This *need* to manage is profoundly important. Ideas and suggestions for adding items to a line and adding new lines come from a wide variety of sources. Customers, salesmen, and executives are fertile sources. So are competitive products, the achievements of invention and discovery, and the demand from the defense establishment for items that will perform in a specific manner. And all too infrequently there are suggestions for dropping an item or a line. A firm that ignores the management problem will more than likely find itself producing goods of a hodgepodge nature, which require costly specialized buying, manufacturing, and selling techniques, on the one hand, or items that have long since been outmoded on the other.

From the positive viewpoint, intelligent management of the product line will achieve some very definite advantages. Homogeneity of items within a line facilitates full, as opposed to short-line, production and results in economies in purchasing, engineering, manufacture, market research, and sales through common outlets. It encourages the adjustment of the line to present and future markets. Logical selection of the lines to be manufactured or carried facilitates the economic employment of plant capacity and permits the product departmentation that nurtures growth and efficiency.

It is difficult to overstate the case for control. Joel Dean[1] has reported in 1950 that a survey of two hundred leading packaged-goods manufacturers in the postwar period revealed that only one-fifth of the new products put on the market by the respondent firms became profitable. The 80 per cent rate of failure was by no means due to any single factor. Rather, it reflected the need, as Dean says, for "a rich mixture of market research, product testing, adequate financial resources, and persistence."[2]

Standards for controlling product line. As pointed out by Dean in the article referred to above,[3] the basic standards for controlling the product line are profitability and the firm's policy in connection with product strategy. He also formulates certain supplemental standards applicable to the acceptance of new products in the line.

According to Dean, the "pivotal test" for determining product line is profitability, with the appropriate concept of profits as incremental returns over a long enough period of time to reflect the contribution that the product makes to enterprise profits. In giving meaning to profits, the standard should be so set as to give weight to the profitability of alternative uses of the firm's resources. In other words, the mere existence of an incremental profit is not enough as a standard, but the profit should be attractive in the light of alternative opportunities.

Because of strategy considerations in a business, profit tests are seldom adequate. While product-line strategy, as Dean recognizes, is usually based on the objective of the company to maximize profits in the long run, it is sometimes traceable to the original product program of the company, purposes of the industrial empire builder, or the effects of a merger with a company having an established product line.

Strategy is intelligently employed when the manager takes advantage of existing conditions or creates conditions external or internal to the firm in order to further enterprise objectives. After assessing the strength, resources, and anticipated reactions of competitors, the individual firm may adopt such product-line strategies as imitating the dominant firm, specializing on the most profitable items made by competitors, leading the industry in innovation, and utilizing fighting brands. The actual strategy chosen will ordinarily be affected by such internal factors as the technical know-how of personnel, conservative or optimistic bias of the managers, and the courage and mobility of the leadership in the firm.

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[1] Joel Dean, "Product Line Policy," *Journal of Business of the University of Chicago*, vol. 23, no. 4 (October, 1950).

[2] *Ibid.*, p. 249.

[3] *Ibid.*, pp. 249–251. Much of the material in this section is drawn from Dean's article.

These strategies take various forms. An electrical manufacturer may wish to develop products around the use and production of electricity in such a way that some products expand the demand for power and others make the power available at low cost. Another company may wish to have a complete line of related products, so that the service available to the customer from such completeness may result in dominance of the market for a major product. Still other companies may wish to build product lines around their processes, know-how, or facilities. Thus chemical companies have entered the textile business; oil companies have entered uranium processing and the design of atomic reactors, partly because of their knowledge of mass production under low vacuum; and automobile companies have entered major household appliance fields. At times, also, product-line strategy is based on defensive considerations. In order to protect its main line of products, a company may enter other lines largely to meet the threat of a competitor who has done likewise.

Where the adoption of new products is concerned, Dean finds certain standards that are supplementary to profit maximization and strategic objectives. While these are primarily supplemental to the standards of profitability, they may also be important to strategy. The criteria by which the advisability of adding one new product rather than another is measured include (1) interrelation of demand characteristics with the existing product line; (2) use of the company's distinctive know-how; (3) use of common production facilities; (4) use of common distribution channels; (5) use of common raw materials; and (6) benefits to existing products.

Control over product line. Authority for the actual control over product line must rest at a high level in the organization structure. In some companies this control is exercised by the board of directors with the assistance of the president and key executive officers. In other companies, the president assumes this responsibility with the help of the heads of such major departments as production, sales, and finance. Occasionally, product-line control is exerted by the sales manager. However, the importance of having a well-balanced and profitable product line designed to meet the objectives of the firm is so great that neither the planning nor the control of product line can safely be delegated below the top echelons of management.

In the actual exercise of control, new products can be evaluated in the light of profitability, strategies, and the firm's resources. Given the applicable standards discussed above, the job of control becomes the task of evaluating candidate products against these standards. Although the problem of applying these standards to candidates for abandonment is essentially no more complex, it does give rise to considerations not existing in the selection of new products. In the first place, a firm is not so likely to apply these standards to existing products, for the simple reason that positive action is not required by the course of events. A company may go on for years with relatively unprofitable products in its line merely because no one has been forced to consider accurate evaluation and consideration for dropping them. In the second place, an existing product has already incurred costs that have been sunk in expenditures for equipment, development, and sales promotion; in this case a firm is likely to retreat from a product rather slowly, especially if it sees any hope of extending the product's life and recovering these costs.

In considering individual products, it is important to compare the incremental revenue of each with additional costs being incurred. But this measure should not stand alone. An item that is an integral part of a full line contributes in an unknown degree to the total income from the group. It may also be essential to the whole strategy of the firm in attacking competition at its strongest point or in keeping competition out of an area or away from a given line. In all such instances the actual contribution to profits is likely to be obscure because there will be no accurate measure of productivity.

Sales

It was pointed out in Chapter 24 that the sales forecast is the prime planning document of any firm. Once the goals for the future period are agreed upon, the several departments proceed to develop programs for carrying out their individual contributions. For the sales division this process involves the development of numerous subsidiary plans concerning the expenditure of effort. Such plans are in turn used as control devices in order to check performance against anticipations.

The sales program. The sales program is comprised of a complex group of plans designed to achieve the goals set forth in the sales forecast. Such plans are made within the framework of over-all policies, and these can be quite restrictive. For example, an enterprise may be committed to selling in a local, regional, national, or even international area. Independent department stores and wholesale firms, as well as many small manufacturing firms, restrict their effort to a local territory. Similarly, over-all policies may restrict a firm to selling the institutional trade or industrial outlets. Within the bounds of such policies, it is the duty of the sales manager to develop a series of integrated plans to reflect his decision on how the product is to be sold. These are concerned with the channels of distribution through which sales effort of a given degree and kind will be expended in order to reach the sales goal at minimum cost.

The sales expense budget. The sales expense budget is developed along with the decisions relating to the type and relative amount of effort to be expended. Such a practice is unusually salutary because it forces the manager to plan the sales program carefully, to analyze the productivity of personal selling, cost and adequacy of service, and types of advertising effort, and to project the cost of selling over the planning period. If the expense budget is properly developed, it will reflect the projected outlays for individual salesmen, specific types of advertising, travel and entertainment expense, customer service, market research, selection and training of salesmen, and administrative expense. Allocations may be classified by product, customer classification, or region.

Sales control. The specific plans covering such items as individual, regional, and total sales goals by products and customers, the advertising and service budgets, and the expense budgets become, in turn, the standards with which results are compared. Controls of this type are widely employed because they have a sense of objectivity. Deviations of an undesirable nature are normally the starting point for an investigation into causes. Such studies often yield good results. But they may also be futile, either because investigatory costs do not pay off or because the standards themselves rest upon forgotten guesswork. The time of a sales manager spent in blue-penciling a dollar or two from a salesman's "swindle sheet" might better be spent in uncovering new markets, promoting a new product, or measuring the productivity of advertising media.

The really important problems in sales control concern the discovery of the effectiveness of the various types of sales effort employed. They are also the most difficult. They require marginal analysis and an evaluation of the halo effect of institutional advertising, the reputation of the firm, and the determination whether the group effort yields greater results than the sum of the marginal efforts of personal selling, advertising media, point-of-sale promotion, service, and quality and price of the product. These problems involve more than distribution cost accounting. This would give only the input costs. They, in turn, need to be compared with realized revenue associated with specific items of sales effort. Such an approach to sales control is still in an embryonic stage.

Pricing

Price policy is an area that requires the careful attention of managers at the time it is structured and at such times as economic conditions call for a reconsideration. The occasional review is concerned not merely with situations that call for a general downward or upward shift of the total price structure, or even with the price of particular items in the line, but also with the more fundamental problem of modifying policies in the light of shifts in the buying power of market segments.

Pricing goals as standards. The goal or objective of pricing, and consequently the standard by which practice is measured, is normally to maximize profits. Whether this goal is achieved through maximizing sales depends upon the elasticity of demand. An objective of this type has several advantages. Profit making facilitates the growth of a firm. It permits the maximization of returns to the factors of production and thus encourages the flow of resources to the firm.

There may be other pricing goals of a short- or long-term nature. Introductory prices of products with a broad consumer appeal may be low in order to encourage their use. Then again, similar pricing of a luxury item may be high, for the purpose may be to skim the cream off the high-income market. A firm may keep the price of billets low so that competitors will be discouraged from entering the field except at the refining level. Or again, a high-price policy of a firm manufacturing vitamins or aspirin may be adopted because of its fear that consumers would not buy a low-priced product. Thus the goals of pricing may not only be the maximization of profits; they may include fending off competition, considerations of how competitors (oligopolists) will react, and short-run strategy considerations.

Need for pricing policies. The smooth operation of an enterprise requires settlement upon a group of pricing policies that are designed to achieve the objectives of the firm. Such policies are broad guides to the thinking and action of managers as they set about building a price structure involving not only price relationships, both internal and external to the firm, but also such matters as discounts, delivery terms, service, deals, and premiums.

Many examples of price policies may be noted. A firm such as the Great Atlantic and Pacific Tea Company has consistently followed a policy of low-price mass market. Its purpose has been to compete on a price basis. This policy does not specify what decisions the managers shall take beyond the fact that every decision must be consistent with the over-all policy. It is thus a standard for pricing control. Implementation has taken many forms and resulted from logic, innovation, and pure creative imagination. For instance, the warehousing pool, contracting in advance with producers of fruits and vegetables, providing growers with seed and instructions for crop raising, and owned manufacturing plants are all procurement and distribution practices designed to get goods on the store shelves at the lowest cost consistent with quality objectives.

Sometimes the opposite policy, high-price limited market, is adopted.

Producers of luxury items are likely to follow such a policy. Firms may also choose a resale price-maintenance policy in order to protect the small-scale dealer or to prevent their product from being used as a loss leader. Or enterprises may shy away from a firm price policy because they intend to employ variable prices in their market strategy. This is an example of having a policy of no policy!

The need for considerable thought in the development of price policies is only too apparent. It is important to follow practices in this area that will fulfill the objectives of the enterprise. The end is served by such broad guides, largely because it obviates the making of many decisions, often contradictory, by various managers within the sales division on the basis of what each considers the best interests of the firm. Thus, consistency in price practices is bound to result. It is reflected in many rules and procedures affecting gross margins, discount and delivery practices, deals, or premiums. It particularly aids in making certain that all customers will be treated alike.

Control over pricing policies. The control of pricing policies centers around the location of authority concerning them, making certain that they are followed, and provision for review. The authority over price policies is not often centered in a sales manager entirely. It may be retained, in some degree, by the board of directors, by the president, or by a committee of top executives. For example, a policy of low-price mass market is likely to be a matter for a board of directors to initiate. A policy of using flexible prices in the broader market strategy is likely to be initiated by a president. In many manufacturing enterprises a merchandising committee headed by the sales manager and composed additionally of the production, engineering, and finance managers is employed for the development of price policies.

In addition to concentrating the authority over price policies, their control also involves checking to see that official policy is being followed. This is by no means a difficult matter if it is carried out consistently. Control by exception, spot checking, and investigation of customer complaints are common means. A manufacturer soon hears from his dealer-customers if one of them is not conforming to his resale price-maintenance policy. Comparative shopping will reflect how well a low-price-mass-market policy is being carried out.

Provision for policy review is an important means of control. Policies can outlive their usefulness. Through lack of perception or through inertia, enterprise managers often continue to follow old policies despite the harm done thereby to the competitive position of the firm. This does not mean that frequent changes in policies are called for. Indeed, it is quite difficult to make a case for changing *basic* price policies. Such a decision would have to rest upon the demonstration of really significant changes in the market structure. Thus, some firms that had priced commercial products in profit margins of 25 per cent of sales found it necessary to lower this gross figure when bidding on defense contracts.

RATE OF OUTPUT

The more significant issues in the control of rate of output concern the operating program, production control, and inventory control. Although the discussion that follows may have overtones of manufacturing experience, the principles involved are, nevertheless, equally applicable to other types of enterprises.

The operating program. The rate at which buying or manufacturing will be carried out during a period of time will be affected by several important influences. The nature of the market and the type of product are most important because of their influence on decisions to operate a job shop or organize manufacturing on a line basis, and on the possibilities of buying or manufacturing for stock. Standard, low-priced items like soap destined for the mass market permit manufacturing to be organized on a line or continuous-process basis. Demand can be readily calculated so that volume of production can be smoothed. Similar products for which the demand is seasonal are often produced for stock in order to smooth out the production run.

Quite dissimilar organization is essential in dealing with the production of high-priced standard, or custom, goods. In such instances the job shop operation is indicated. Manufacturing is undertaken on the basis of specific orders, and these are ordinarily filled as received.

Between these two extremes is the plant that is prepared to operate on an intermittent-repetitive basis. Firms that have product lines containing several items manufactured on common equipment have this kind of an organization problem. An automatic screw machine plant is a good example. If there are twenty items in the line and all must be manufactured on the same equipment during the production period, it is apparent that twenty or more setups are required. At this point the pressing issue is the economic lot size to produce. Whether it will pay to keep finished stock low and make several setups per item in the line or whether the firm should manufacture for stock and make only twenty setups per production period is an important question. Fortunately, the minimum economical lot to manufacture can be readily calculated.[4]

Production control. In its common usage production control embraces both the planning and control aspects of manufacturing and assembly operations. As a planning activity it is concerned with maximizing the employment of production facilities with the general purposes in view of minimizing operating costs and meeting delivery schedules. Consequently, this phase reflects needed planning in terms of materials requirements, detailed equipment use, production runs, and order priority.

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[4] Billy E. Goetz, *Management Planning and Control* (New York: McGraw-Hill Book Company, Inc., 1949), pp. 206–212.

The control phase is embodied in the follow-up procedures. This is the technique of determining whether the production plans are working properly. The material follow-up group checks on each step of "the procurement cycle of materials, supplies, parts, and subassemblies—in order to determine that each is progressing and being completed as per its scheduled date." [5] The responsible managers are notified of any serious delay occurring at points in the cycle. The in-process follow-up section has similar duties with respect to the production cycle. The actual technique of accomplishing control depends upon the facilities available in the firm. Heretofore, enterprises have had to rely upon records such as purchase orders, invoices, inspection reports, and inventory cards, as well as personal expediting. Such means appear crude when compared with the possibilities of electronic computers. But it must be remembered that the computers can act only on information they possess. They cannot report reasons for delay in issuing purchase orders, in receipt of goods, or machine breakdowns.

The control phase of production control actually is more restricted than the terminology implies. It does not embrace production policies, over-all procedures in the plant, or all phases of cost and inventory control. Control of production is much more complicated than production control, and the authority over it is typically dispersed among various managers.

Inventory control. The control of inventory is an exceedingly significant activity because the investment in raw materials, supplies, parts, subassemblies, and finished goods plays an important part in the solvency of a firm. There are two reasons for this. In the first place, inventory speculation is unusually tempting, particularly in times when price inflation appears assured. It is a disease that infects nearly all firms at some time or other and is identified when officers will take advantage of unusual bargains and when purchasing agents extend their commitments over longer periods than necessary for production purposes. The dangers are that the forecasts of buyers may be wrong and that such speculation will drive prices higher and more quickly than they would otherwise move.

In the second place, the relative proportion of a firm's working capital tied up in inventory can have a vital influence upon its solvency. Suitable current ratios are of little avail in emergencies, because the market for forced liquidations is treacherous. The specific dangers of too heavy inventories are reflected in low cash balances and the lack of adequate earnings on the invested capital.

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[5] C. O'Donnell, "Problems in the Organization of Multiplant Production Control," *Journal of Business of the University of Chicago*, vol. 18, no. 3, pp. 142–143 (July, 1945).

The importance of inventory control is generally well understood by most firms, and they centralize authority over inventories at a high level in the organization structure. Sometimes the financial officer is in charge; at other times a top-level committee is employed. In either case the authority over policy remains centralized.

The objective of inventory control is to make certain that adequacy in the volume of materials and finished goods is achieved. On the one hand, it is important to avoid interruptions of production due to delays in the flow of materials and to be able to fill customer orders with a minimum of delay. Production requirements are readily calculable, but delivery standards for customer orders may not be. The latter is largely a reflection of competitive conditions. Immediate delivery on orders may not be necessary if competitors are unable to better one's terms.

In the control of materials required for production, the order point is strategic. It is a resultant of the quantity of an item used per unit of time, the procurement cycle, the economic order quantity, and a safety factor. The standards used are derived from several sources. The procurement cycle reflects the average time required between requisition of goods and their receipt; the economic lot to order is determined by the quantity discount rates of suppliers and the volume required to qualify for minimum freight rates; the safety factor reflects past experience; and the rate of usage is available from the production control department.

Control of labor costs. In addition to controls over materials and their flow, it is essential to control the labor input associated with a given rate of production. Payrolls composed of both direct and indirect labor have a way of growing in every type of activity. Innovations in techniques and the emergence of new skills are reflected in expanding service and staff personnel. Inefficient procedures and methods are very difficult to eradicate. Managers are often unable, through lack of capital, or unwilling, through a dislike to junk partially depreciated equipment, to improve the productive efficiency of a plant by introducing laborsaving machines and automation within a department. Labor unions are sometimes able to block proper manpower usage by craft rules and featherbedding. And some managers are known as labor hoarders. Whatever the reason, the net effect is to raise the direct and indirect labor cost of production.

An intelligent attack on this problem begins with a study of methods, procedures, and job evaluations. The activity in question is analyzed first to determine whether it is essential to the productive process and whether it facilitates production. Assuming that it qualifies on one of these counts, a study of the most efficient flow of materials and paper through the job will result in an appropriate procedure. The best way of accomplishing the activity involves a methods study. The evaluation of the job will shed light on the skill required. From such information the required man-hour standard can be determined.

If the enterprise is operating on a budgetary control system, the individual department is the locus of the studies just mentioned, and from them the manager is able to calculate his manpower requirements based upon the level of activity indicated by the production plans. At the beginning of the production period many firms will assemble and compare the manpower budgets of the several departments, identify the prospective needs for transferring labor interdepartmentally, and reach a decision to expand or contract the labor force, approve overtime operations, and contract work outside. During the production period, control is achieved by comparing, on a departmental basis, actual and estimated labor usage. Where individual managers need additional labor, they either get permission from superiors or are prepared to justify it when the control reports are in.

Where no budgetary control system is employed, enterprises rely upon continuous study of procedures and methods as they pertain to a given function as it is undertaken from one department to another. Such practices often result in work simplification, improved methods, and greater labor efficiency. A thorough study, for instance, of the handling of a sales order would involve a procedural analysis from the time the order is received until it is shipped. Numerous departments would be concerned with such a study. Methods improvements and job evaluations made along the way would permit many managers to improve the efficiency with which their phase of the activity is accomplished and thereby economize in the use of labor, equipment, and space. The over-all quality of the results attained depends in large degree upon the skill of the industrial engineering group making the study and the attitude of the several managers involved. Such studies are often extensive, require much time, and are open to considerable negligence and even sabotage. The fervor for efficiency is often lost long before the undertaking is completed. This is the basic reason that less thorough analyses through the intradepartmental approach, with its showing of savings, are preferable. Nevertheless, a coordinating analysis is essential for activities of an interdepartmental nature.

Quality Control

The function of quality control is concerned with making certain that the end product conforms with predetermined standards of quality, workmanship, size, and form. These qualities, ordinarily fixed by the merchandising committee in manufacturing enterprises, are established with the purpose of fitting the product to the intended market. Even in small plants the control of quality can be a difficult matter, chiefly for the want of standards and proper organization. In large-scale enterprises, which depend upon mass production to minimize cost, the problem can be formidable. The natural tendency to emphasize output is certain to place a strain on quality standards, and there is the persistent danger that work will be done on defective parts.

Technique of quality control. Control over quality is accomplished by inspection, reports of defective work or material, and a search for causes. Inspection itself may be accomplished by counting, mechanical measurements, electronic and other devices, chemical analysis, and judgment. The last is important in deciding whether workmanship and appearance of the item are satisfactory. The other means are pertinent in comparing receipts with orders and in measuring the physical and performance characteristics of materials.

Standards. Inspection cannot be accomplished without standards for comparison. These are developed from various sources. Engineering drawings are important sources where tolerances are involved. Either the drawings themselves specify permissible variations, or these may be determined by a production or merchandising committee. Bills of materials are important sources for standards of quality and quantity of items. These documents are used by purchasing agents in ordering materials and by in-process inspectors. The receiving inspectors use the purchase order as a standard for passing upon goods received from sources. In wholesale and retail establishments buyers are usually guided in their purchases by the price-lining decisions and quality requirements of their merchandise managers, by customer complaints, by requests for repairs and service, and sometimes even by a test department.

Inspection points. As may be gathered from the foregoing, inspection is accomplished on the receiving dock, as the goods are in process, and at the finished-goods stage. Inspection should always take place at strategic points in the receipt, handling, and completion stages of materials in their flow through a plant. Receiving is strategic for several reasons. It is important to count and compare the quality of goods with the purchase order, so that claims for adjustment can be made promptly. Heavy costs, particularly in manufacturing, can be avoided if receiving inspection is thorough. Materials and semifinished products tend to lose their identity when mixed with previous orders in stockrooms, and thorough receiving inspection will eliminate defective materials.

Inspection is also necessary at various points in the production cycle, though the location of these is not always apparent. Certainly a strategic point is the completion of operations on a part before it is combined with other semifinished parts. But whether inspection should be made at the end of each operation is an economic problem. Where the cost of inspection is greater than savings involved in avoiding defective parts or in eliminating costly rework of a finished good, no strategic point is present.

A final strategic point for inspection occurs just before products are sent to the finished goods warehouse or to the shipping room. Inspection at this point involves testing for performance and judgment as to the appearance of the item. Both are obviously important factors in the salability of the item. Often engineering personnel will be called upon to make this test if performance standards are rigid and require technical skill to make adjustments or to decide whether to scrap or repair. For most mass-production items, however, inspection standards are set in such detail that a trained inspector can apply them.

Authority of the quality control manager. One of the important principles that guide managers in locating a particular function is the avoidance of assigning an activity to a department if the activity is a check upon that department. Quality control is a case in point. This principle cautions against assigning quality control to the manager who also is responsible for maintaining output schedules. Where pressure for quality is predominant, output would tend to suffer; where pressure for volume is stronger, quality would tend to be sacrificed. In manufacturing establishments, this difficulty is solved by having the production superintendent and the quality control manager report to the same superior. It is the latter's duty to see that a desired balance in quality and volume standards is achieved.

In the most effectively organized enterprise, the manager of quality control recruits and trains his inspectors and places them at predetermined strategic points in the production cycle. They report solely within the quality control department. They employ approved techniques for determining quantity and quality, and report rejects together with reasons for them. Reports of defective materials, parts, and workmanship are brought to the immediate attention of the responsible managers, whether they are production foremen, purchasing agents, or others. This procedure permits immediate investigation to determine the causes for rejection. These may be due to obvious difficulties, such as failure to follow engineering specifications, lack of training at the workman level, or machine failure. They may also be due to lack of good judgment on the part of inspectors or carelessly drawn specifications. Sometimes the cure can be achieved quickly; at other times, extended research may be called for in such areas as chemical composition, new products, and improved machine design.

SELECTED REFERENCES

Curley, J. C., "A Tool for Management Control," *Harvard Business Review*, vol. 29, no. 2, pp. 45–59 (March, 1951).

Dean, J., "Product Line Policy," *Journal of Business of the University of Chicago*, vol. 23, no. 4, pp. 248–258 (October, 1950).

Goetz, B. E., *Management Planning and Control*, Chap. 11. New York: McGraw-Hill Book Company, Inc., 1949.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control*, pp. 162–169, 177–184. New York: McGraw-Hill Book Company, Inc., 1951.

Lamperti, F. A., and J. B. Thurston, *Internal Auditing for Management*, Chaps. 5, 23, 24. New York: Prentice-Hall, Inc., 1953.

Mueller, R. K., *Effective Management through Probability Controls*. New York: Funk & Wagnalls Company, 1950.

Phelps, D. M., *Sales Management*, Chap. 29. Homewood, Ill.: Richard D. Irwin, Inc., 1951.

Trundle, G. T. (ed.), *Managerial Control of Business*, Chaps. 29, 30, 32. New York: John Wiley & Sons, Inc., 1948.

Watson, R. H., "Bases for Allocating Distribution Costs," *Journal of Marketing*, vol. 16, no. 1 (July, 1951).

28

CONTROL AREAS: FINANCE

In this chapter consideration is given to three important areas of financial control. They are the costs of operations, investment in plant and equipment, and provisions for cash requirements. Control, in this area as in all others, is effected through the establishment of appropriate standards, determination of variances, and reporting of results in such a way that personal responsibility for deviations from plans can be detected.

CONTROL OVER OPERATING COSTS

For the purpose of the discussion here, operating costs are considered as the outlays for the persons and material required in the purchase, production, and sale of goods or services, exclusive of investment in plant and equipment. Such a definition is designed to include not only direct labor and materials but also indirect labor and materials associated with the operation of staff and service departments and of general administration.

Basic cost standards. For the purpose of controlling cost, enterprises employ a variety of standards, although they tend to fall into three categories: (1) historical cost, which is based on the recorded past expenses of the company; (2) estimated future cost, which reflects what the company estimates that cost will be; and (3) standard cost, which is based on what costs would be under scientifically determined levels of efficient operation.

Historical Cost. Historical cost is developed from the accounting records of the company and thus reflects what costs have been. Ordinarily, they are related to some measure of output, such as expense per unit produced, per ton-mile, or per dollar of sales. On occasion, they are related to units of input, such as cost per machine-hour, per hour of direct labor, or per ton of material used. Usually, also, in addition to being summarized as totals, these costs are broken down into process or function so that the cost standard may be so related. Thus, a company may be interested in gathering from the records cost per unit machined or plated, or cost per unit bottled or packaged. Companies also find it useful to separate costs by the nature of inputs, such as direct labor cost per unit produced, material cost, and allocated burden.

Control is exercised through the trends discerned from past data and from comparing recent results with these past trends. Clearly, this basis of control rests on the assumption that costs that were incurred yesterday, last week, or last month, are a good measure of future expectancies.

The chief advantages of this kind of cost standard are availability and relative cheapness. Even the most rudimentary accounting system will yield some historical costs that can be used as standards. Because they require no extra effort except analysis of the accounts, they are also fairly inexpensive to obtain.

On the other hand, historical cost suffers from a serious shortcoming in that it necessarily employs the past as a standard. Both the standard and the comparison of actual with the standard necessarily depict what has happened and, because of the lateness of completion and analysis of accounting records, may be from days to months late. Although the past is sometimes a reasonable standard to use for the future, the many elements normally found in a company's future operations would only by coincidence be present in the past.

Moreover, past costs, in and of themselves, furnish no evidence as to what costs *should* be in the light of a reasonably attainable level of efficiency. They suffer because of the lack of a base standard. Where a trend is the standard, the normal reaction is to feel satisfied if it is favorable. This view can lead to hasty assumptions of enterprise welfare. If particular costs are out of line in the first place, it may take years, even with continuous improvement, to reduce them to desirable levels. Furthermore, a decreasing cost trend may be harmful in some circumstances. Rising selling costs may be a favorable development if their ratio to sales is decreasing.

Still another objection to this type of standard is that the reports tend only to reflect the information in the accounting records. Consequently, there is a strong tendency for the cost analysts to multiply and compound the reports on areas for which there are some data and to omit entirely many important areas where control is needed.

However, many companies do use historical costs as standards for control with a fair degree of success. Where costs are readily available and the manager may have them without undue delay and where the operation of a business is not subject to rapid changes, the trends disclosed by analysis of the past, and the reasonable assumption that they will continue, make historical costs a useful standard. Furthermore, in many small businesses and in many cost areas of much larger businesses, historical data may be the only standards available to the manager.

Estimated Future Cost. Firms sometimes utilize estimated future costs as a standard against which to measure actual expense. Estimated costs are usually arrived at on the basis of cost experience plus an evaluation of factors that might influence future cost behavior. It is apparent that such cost estimates depend heavily for their reliability on managers' or staff specialists' judgment of cost trends.

The principal drawback to the use of estimated costs as a standard is that they are likely to overlook the reduction of costs through application of scientific methods and procedures. At the same time, in the absence of better standards, estimated costs are the best that may be available. There are many businesses, such as those engaged in research and development, for which costs based on scientific standards can hardly be developed. There are also a number of business areas, such as personnel and public relations, where better standards are not available. Furthermore, in some business operations the rapidity of change and the lack of repetitive activities may make it impracticable to design better standards.

Moreover, many companies find that estimated costs have the advantage of forcing on the estimator careful analyses of economic and business conditions, thereby lending reality to projected costs. If they are in fact accompanied by study and analysis, estimated future costs may be reasonably accurate standards of control.

Standard Cost. Standard cost is the predetermined cost for an operation or a unit of finished product "intended to represent the value of direct material, direct labor, and manufacturing burden normally required under efficient conditions and normal capacity to process a unit of product." [1] It is thus based upon the standard of what costs *should* be if an operation is performed efficiently. This is not to imply that standard costs should be the "ideal" or that they should represent cost under efficient conditions but rather that they should represent a reasonably attainable level.

Standard costs require the development of physical standards of material, labor, and machine utilization based upon efficient and practicable methods of accomplishing an operation. When these physical standards are translated into monetary terms, cost standards result. These are used for control when a comparison of actual with standard costs is made and interpretation of variations furnishes a basis for managerial action. Since most standard costs are lower than costs that may reasonably be expected, managers tend to employ as the actual standard of control a more realistic performance level. This level is expressed as the percentage of standard costs that, at a given time, might reasonably be reached.

Standard costs naturally change as circumstances vary. A shift in the volume of operations, new methods of fabrication, utilization of machinery in place of labor, product modifications, and similar changes in the production process will normally be accompanied by revision of physical output and cost standards.

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[1] W. A. Paton (ed.), *Accountant's Handbook* (3d ed.; New York: The Ronald Press Company, 1953), p. 225.

Standard costs appear to offer definite advantages as a control device. If standards are accurately set and comparisons with actual outlay made, the calculated variances should reflect the quality of performance. However, because changes in underlying conditions so seriously affect the accuracy of cost standards, controls of this type work best for a firm that acquires its factors of production in stable markets and produces a standardized product in fairly large quantity.

But standard costs are sometimes illusory because of difficulties in their calculation and the problem of maintaining flexibility under changed circumstances. The problem of converting physical standards of input into dollar figures is considerable when the large number of physical standards in a typical firm is considered.[2] These physical standards must be selected for their applicability to the problem and converted to dollars in order to arrive at a standard cost. Since changes occur often in the costs of labor and materials, as well as in technology and methodology, firms using standard costs are continuously faced with the problem of maintaining their accuracy. But accuracy requires flexibility, which, in turn, requires continuous study and an ability on the part of managers to modify standards. Where physical and cost standards become a factor in the wage structure, as is the case with piece rates or the loading of machines and men, flexibility is not always easily obtained.

Cost accounting as a control device. Cost accounting has little to do with the original purposes of accounting, which were to provide appropriate information for financial and tax purposes. It is, on the other hand, a relatively recent development designed to provide managers with information needed for control purposes.

Variant Methods. The cost accounting system may be designed to develop information relative to departmental, product, process, or job-order costs and to provide the basis for standard costs. Costing by departments requires that the chart of accounts be appropriate to the organization structure. The resultant data are important for control purposes and may provide the basis for some policy development. Product costing is less useful for control purposes, since it does not provide for cost breakdowns on an organization-unit basis, but it does aid in answering such policy questions as the make-or-buy issue, and in developing cost-price relationships. In process costing, the factory department is organized on a product basis and its subdepartments on a process basis. Consequently, this method of costing will yield product, departmental, and process information. It is useful for control and for some policy-making purposes but is likely to be quite expensive. In job-order costing all outlays are accumulated and charged to the batch or shop order, as the case may be. This system is chiefly used for price-setting purposes and has the disadvantage of not being aimed at the various organization units responsible for costs.

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[2] For a discussion of this problem see Billy E. Goetz, *Management Planning and Control* (New York: McGraw-Hill Book Company, Inc., 1949), pp. 92–115.

Whichever method is employed, each will require the development of physical and cost standards in order to provide bases for comparison. If this is not done, all that the manager will have are cost data of a current nature. He will have no idea what costs *should* be. Hence, cost accounting is of limited use as a control device unless the data can be compared with a standard of some type.

Shortcomings of Cost Accounting Techniques. The techniques employed by accountants in accumulating and reporting cost information have been a source of criticism.[3] Although problems exist in the accurate accumulation of direct-labor and material costs, largely because of the need for correct and complete basic records of time and material, the principal criticisms are aimed at the many arbitrary allocations of common costs. In any business operation there are a number of costs, such as supervision, power, maintenance, and rentals, that can hardly be traced to the individual unit produced. There are in addition variances of many kinds, such as those resulting from vacation pay, shift bonus, scrap, and price differences, that must be allocated in some way. In the course of these allocations of costs that cannot be directly traced to the unit of output, it is only natural that cost accountants should make some arbitrary allocations. In so doing, detailed costs, often carried out to several decimal places, tend to rest upon broad and sometimes elaborate assumptions that may make accuracy an illusion.

In defense of these shortcomings, cost accountants admit the existence of errors and arbitrary allocations but assert that the expense of providing more accurate data would not be justified by the results and that, in many cases, no amount of research and record keeping would divide the indivisible involved in common costs. This is an understandable and reasonable defense, but it raises two problems. Since managers utilizing cost information may find it advisable to have more accurate data for correct decision making, even at greater expense, the problem of cost finding should be viewed in the light of the benefits that would result from more accurate costing. Another point of importance is that managers utilizing cost data should be informed as to the accuracy of costs, particularly with respect to those costs that represent items directly allocable to units of production and those costs that have been arbitrarily allocated. The advantage of separating costs that are truly direct and those costs that are indirect, or common, is that the manager may thereby be able to see results in terms of margins. It is logical and practical that the additional costs that would be incurred or saved should be strategic in decision making.

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[3] For a critique of cost accounting methodology, see Goetz, *op. cit.*, pp. 118–137. Note that Goetz states that "because it is misconceived, is misdirected, and attempts the impossible, traditional cost accounting is at once overelaborate, inadequate, and misleading" (p. 137).

Budgeting for variable burden. Cost accountants give considerable attention to the matter of variable burden. They have observed that certain types of costs are neither directly variable with output nor entirely fixed. Between these extremes, which are in themselves oversimplifications, they see such costs as supervision, inspection, clerical, material handling, and maintenance change in total as output or direct-labor-hours increase or decrease. The change is quite discontinuous, with none recorded for important production variations and a sizable increase or decrease becoming effective when output is considerably modified. In the usual diagram depicting this phenomenon, the statistical paralellograms of variable burden are represented by a smooth curve. From this curve the allowable variable burden is determinable for each change in output.

From a control viewpoint, the important questions concern the origin of the standard for variable burden. How does one decide upon the allowable supervision for a thousand direct-labor-hours? What is the allowable expense for production control or inspection when output reaches 90 per cent of capacity? Developing the history of these costs does not give the answer, because no standard emerges that foretells how much costs *should* be. Arithmetic averages, moving averages, or current data will reflect whether the actual cost is more or less than formerly but will not indicate whether it should be. Consequently, other approaches to the development of standards are needed. Numerous devices are at hand. In some cases time and method studies will reflect the physical work capacity of various labor classes such as typists, file clerks, schedulers, and inspectors. The span of management will reflect the number of supervisors needed. The production schedule permits the counting of needed items such as requisitions, forms, number of inspectors, and maintenance personnel. Standards set by these means bear a practical relationship with actual needs of the firm and are immeasurably superior to historical averages of any type.

Once the standard is determined and variations in burden are calculated for varying output, direct-labor-hours, or machine-hours, setting the target for budget purposes is a purely clerical task. Shop orders scheduled for the succeeding months and converted to a measure of capacity will toll off the allowable variable burden. Comparisons with actual performance will reflect the extent to which the target has been achieved and indicate whether any further investigation of unfavorable results should be made. Employed in this manner, after being properly derived, variable burden control can be achieved effectively.

Controls over general and administrative costs. General and administrative costs are generally conceived as a fixed outlay for the budget period. The general costs, associated with the outlays incurred by the general management, include salaries, wages of the clerical force, indirect materials, fixtures, and equipment. Administrative costs may be looked upon as those incurred by divisional or departmental managers, although they are known by the same names, namely, salaries, repairs, supplies, clerical, traveling, and communications expenses.

The budgeting process involves the establishment of cost targets in each category and account. This is normally accomplished by an analysis of the costs incurred in the last fiscal period and by taking into consideration any variations attributable to salary and wage changes, sales and production budgets, material supplies, and similar occasions for modifications. Analyses of price trends, changes among suppliers, procedural improvements, work simplification, changes in rental, insurance and interest rates on expiring contracts are also fruitful sources for consideration in preventing historical costs from running away with the business.

If the budgeting is properly accomplished, there is little enough that remains to be done in controlling these types of costs. Only the exceptional negative deviation should be reported. Since this is most likely to occur where individual managers are constructing an empire and where staff and service departments are ambitious to expand, these are the usual places to look for the creeping paralysis of rising administrative and general costs.

CONTROL OF PLANT AND EQUIPMENT COSTS

Outlays for plant and equipment include investment in building sites, physical plants, the installation of power sources and facilities, and the purchase and placement of machines, conveyers, elevators, and loading facilities. The cost of such assets is a major item in the operation of an enterprise, and its control requires the close attention of managers.

Importance of control. The acquisition of fixed assets influences materially the welfare of the firm, because of their use of scarce funds and the unusually long period required to recover the investment from earnings. There are at least three characteristics that require the deliberation of several managers before an investment is made: (1) the sunk nature of the investment; (2) the issues raised by overinvestment and underinvestment; and (3) the financial aspects of a commitment.

Once an investment in plant and equipment is made, the possibility of recovery through sale or exchange depends upon the market for such facilities. The latter, in turn, is affected by the stage of the business cycle at the time of the contemplated sale and by the degree to which the assets are specialized. In active phases of the cycle induced either by expanding investment in production facilities or by the demands and preparations for war, the marketability of the assets is favorably affected. Furthermore, relatively unspecialized resources have many alternative uses and, consequently, will benefit from the broadened demand. On the other hand, the reverse of these considerations would result in a selling price equivalent to scrap value. The practical certainty that an investment, once made, can be recovered only through its use as a productive facility is an important matter to consider in the maintenance of the firm's solvency.

Overinvestment and underinvestment are relative terms. Both are affected by time and the size of the market. Overinvestment at a point in time is reflected by a low ratio of profit to fixed assets. This condition can be justified only by a forecast of lower costs to be obtained, expanding markets, and higher earnings. The important question is one of the length of time for which the forecast should be made. Plans should logically be laid far enough in the future to assure the manager that any investment in fixed assets will be repaid through their revenue-producing ability. If the apparent overinvestment can be justified by a forecast such as this and if it is necessitated by conditions that make temporary excess investment in facilities economical, it represents a wise planning course and a reasonable standard against which to measure events.

Underinvestment is associated with different problems. It usually places a firm at a disadvantage with competitors, either in terms of high costs or low output. Managers who put the firm in this position may have misjudged the market and their place in it, they may have decided to stand still while others expand, or they may have been unable to do otherwise because of inadequate financial resources. Managers may misjudge the market because they are backward in utilizing the advanced forecasting techniques available to business economists and others or because they are too preoccupied with current problems to give attention to future trends. Other managers tend to overlook the steps taken by their competitors, the implication of innovation, or the changes in the social and political environment that may affect their business. Thus managers who have a desire to stand still or keep small may enjoy a successful kind of conservatism, but in the long run this attitude tends not to be consistent with successful operation in a dynamic market. A company with an expanding demand for its products may lose this market to actual or potential competitors unless it expands to hold its position.

The financial aspects of plant and equipment investment also require careful control. Additional assets may be acquired from funds contributed by a company's owners, from borrowed funds, or through lease. The first method may be desirable and reasonably safe if the working capital is not reduced to dangerous proportions. While financing from ownership funds is often considered to be a costless method, it should not be so regarded because of the inherent scarcity of these funds and the number of profitable alternative uses to which they may be put. Borrowing creates a legal liability for the payment of regular interest charged and the eventual repayment of principal. Loans, being preferred claims upon the business, must be treated with particular care, and the manager should be quite certain of the earning power of the assets before making a commitment financed in this way. If an investment is financed through lease, the company must normally sign an agreement involving a commitment over a period of time, and the legal liability under this method differs little from that involved in borrowing capital. Whether investment comes from owned funds, borrowed funds, or leases, however, the essential scarcity of capital and the effect of these commitments upon an enterprise's welfare require control of the highest order.

Controls based on approval. In many companies, control of capital expenditures is attempted through an elaborate system of approvals. For example, a foreman or superintendent may initiate a request for the purchase of a lathe or grinder, the plant manager for a conveyer or heating system, or office manager for computing equipment. These requests may follow an established course of approvals, depending upon the size of the expenditure involved. A company may, for example, authorize department heads to approve capital expenditures of less than $200, division heads to approve expenditures of $1,500, and the president, expenditures of $5,000, with larger expenditure requests requiring the approval of the board of directors.

A system of approvals is based upon the assumption that managers at various levels should have a degree of authority consistent with their position. However, because of the strategic nature of capital expenditures, there is a tendency for authority to be fairly well centralized in this area and for expenditure approvals below the level of the president or board of directors to be quite low. The intention is, of course, to exercise close control over capital investment.

However, the control of capital expenditures through approvals is not in itself sufficient to achieve the basic purposes of control of capital. A large number of small expenditures may be approved at low levels, yet add up over the course of a year to a considerable investment. Moreover, there is a tendency in such a system for approvals to be made on the basis of the merits of individual projects and not in terms of wise allocation of the total available capital resources of the firm.

Plant and equipment budget. In order to meet the dangers inherent in the approval of individual capital-expenditure projects, firms adopt the practice of utilizing a plant and equipment budget. This practice serves several ends. It assures that the total capital needs of the firm will be balanced against its capital resources and that prospective commitments will be examined with a view to determining their consistency with long-range plans. Another advantage of capital budgeting is that it forces on the company management a more careful and balanced study of capital expenditures, since needs are almost certain to exceed the capital funds available and a careful analysis of capital becomes necessary to decide between alternative uses. This analysis and its reflection in the budget furnish an excellent means for forcing managers to decide questions of priority for a planned period rather than merely in the light of current needs.

A further advantage of capital budgeting is that it facilitates the problem of financing. Company officers are thereby enabled to plan the sources of capital in the most effective way so that funds will be available as needed.

By budgeting capital expenditures, the top managers of the firm have the opportunity to centralize control in this important area without removing the initiative of lower-level managers. This centralized control does not require that lower managers have no part in the expenditure of capital funds, since a suitable budget procedure requires them to request capital improvements and to participate in their justification. Moreover, a manager operating under a capital budget may be given considerable freedom and authority to select the kind of equipment or building he desires, subject only to the control over the funds authorized.

To a very great extent, also, the capital budget operates as an effective control over major plans and policies of the company, few of which can normally be undertaken without some capital expenditure. Both the expenditures budgeted and the data used to support the original investment proposal become standards for control purposes. Comparison with these standards provides an opportunity for replanning significant deviations, and revisions of budgeted items give an opportunity for review of expenditure programs.

In comparing actual with planned cost through regular reports, it is usually wise in the case of major projects to maintain estimates of the degree of completion as compared to schedules and the amount of expected cost overruns or underruns. Such reports will aid in keeping construction or installation on schedule and permit integration of other company plans with these schedules. Project overruns will give managers an opportunity to modify the project or to make sure that sufficient funds are available for the expected higher costs. Evidence of underruns has the effect of freeing capital authorization for use in other projects.

Standards for capital investment. One of the most widely used standards for determining the wisdom of capital investment is the expected return on the investment in projecting facilities or working capital.[4] On the assumption that it is the purpose of a business enterprise to utilize its capital in a way to yield the highest profit, this is a reasonable standard and a fairly objective way of deciding between uses of capital. One of the difficulties, especially for smaller investments, is that the earning power of the investment may not be easily calculable because of the difficulty of separating its effect from the plant as a whole.

Another method sometimes used is the application of various financial ratios, such as the ratio of fixed assets to net worth, fixed assets to sales, or the number of times carrying charges are earned. The difficulty with these ratios is that they sometimes cloud the essential issue of earning power of projected investment in its relation to capital availability and competing uses for capital. If they are used carefully, they may be helpful in justifying an expenditure. Or, as is sometimes the case, these and other ratios have become important measures to bankers and investment analysts and may therefore become important to the top managers of a firm.

Attempts have also been made to utilize flexibility as a measure of the wisdom of capital investment. An investment in plant or equipment which has a wide use and which could be liquidated at reasonable values without much difficulty naturally involves less risk than investment in highly specialized equipment, such as a gasoline cracking plant, which is for all practical purposes a truly sunk cost. This standard is primarily a planning one, and the extent to which it is used will depend upon the economics involved between specialized and unspecialized equipment and the certainty a manager feels as to the future profitable use of the plant or equipment.

One of the most common bases for supporting approval to commit capital is the prospective reduction in the cost of operation. One problem with this approach is that it is difficult to be sure that all relevant factors are considered and that the projected cost savings are seen in the perspective of total plant operation. The way a machine is used, its suitability to the entire plant operation, and its consistency with projected output schedules, as well as the effect of new investment on quality or on employee morale, are among the various matters that should be considered. In other words, cost-savings estimates must be regarded in their total effect, and often, when so regarded, the cost advantages are greatly lessened.

[4] For a discussion of this method of a system of over-all control, see Chapter 29.

A variation of the cost-savings standard is that of revenue-increasing potentiality. For example, a wholesale paper firm with which one of the authors is acquainted found that its volume of sales was being limited by the lack of warehouse space to service the business developed by an enterprising sales force. The revenue-producing potential of warehouse space was used with effect as a suitable and accurate standard for the planning and control of new facilities. Similar in nature to space problems that require capital investment to expand sales potential of current products or new product lines is the requirement of investment in new equipment that can furnish greater output, thus increasing the revenue potentiality of the plant.

Still another standard, and one which reflects cost savings and revenue-increasing potentials, is that of basing capital expenditures on definite payback periods. A company may feel that its capital is so limited that, regardless of normal depreciation rates, it will not make an investment in any capital facilities unless they yield returns over all costs adequate to pay back the capital in, say, two or three years. This standard has much appeal to businessmen as a means of rationing capital or controlling new investment. In a sense, it is a variation of the return-on-investment standard. But it makes no essential differentiation between short-lived and long-lived capital assets. Moreover, it does not give enough effect to the liquidity of various assets. One advantage that such a standard clearly has, however, especially for the firm with extraordinarily limited capital, is that it can be used as a means of assuring a high degree of capital flexibility.

Control of Cash Requirements

The control of the cash requirements of an enterprise has an urgency that does not attach to the controls over operating costs and the investment in plant and equipment. This characteristic devolves from legal considerations. Firms that cannot meet payrolls, notes and accounts due, or taxes cannot maintain themselves in business. This situation can occur even when a firm is solvent in the sense that positive surplus of assets over liabilities exists. To avoid such a situation, close and careful control over cash requirements is essential.

Nature and purpose of cash budget. A cash budget is essentially a forecast of cash receipts and expenditures for a given period of time, and, as a matter of fact, some companies refer to it as a forecast rather than a budget. In any case, as a control device the budget or forecast represents a prediction of sources of cash and of expected cash disbursements for various periods in the future. The purpose of the budget is to assure managers that the firm will have at all times cash available to meet its operations.

As pointed out in the discussion of planning in Chapter 24, the cash forecast is developed by setting down the anticipated cash receipts of a firm, usually by monthly periods, for six months to one year. Cash income is distinguished from operating revenues by including, in addition to cash sales and nonoperating income, conversion of assets to cash, such as collections of accounts receivable, and new funds obtained through borrowing or investment of stock. Against these receipts will be listed cash disbursements, both for operations and capital investment. The flow of cash receipts and cash disbursements, plus the cash available at the beginning of the period considered, will result in a forecast that shows the net cash available to the firm at various times in the future. Perhaps the most important control aspect of the cash budget lies in the action it motivates. If top managers of a firm can see that cash will not be available to meet its operating requirements and operations at a future period, this forecast will reveal the necessity for taking such action as the reduction in expected outlays or the securing of additional cash through sales, borrowing, or new investment. Because of the critical importance of cash availability, there is certainly no more necessary control device to any business firm, large or small, than the cash budget or forecast. It is, in a sense, the minimum control that any management should have.

This control naturally operates in two directions. If a forecast indicates an anticipated stringency in the cash position, defensive planning is required. If it indicates excess cash reserves, an expansion in the program of cash expenditures may be suggested. This expansion may be in the form of investment in short-term securities, the declaration of dividends, an upward revision of the equipment budget, the initiation or expansion of a research program, a reduction in debts, the widening of company product line, or many other uses of the cash expected to be available.

One of the fundamental advantages of the cash budget is that it both reflects and encourages careful planning. Since all kinds of enterprise activities and needs have their effect on cash, the focusing of attention on cash flow and availability results in drawing together all the plans of the firm. The cash budget, therefore, is a valued instrument not only for the treasurer but also for the other top managers of the firm responsible for its future welfare.

SELECTED REFERENCES

Goetz, B. E., *Management Planning and Control,* Chap. 6. New York: McGraw-Hill Book Company, Inc., 1949.

Grodinsky, J., *Investments,* Chap. 9. New York: The Ronald Press Company, 1953.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control*, Part C, Secs. 8, 10. New York: McGraw-Hill Book Company, Inc., 1951.

Lamperti, F. A., and J. B. Thurston, *Internal Auditing for Management*, Chap. 4. New York: Prentice-Hall, Inc., 1953.

Lang, T., W. B. McFarland, and M. Schiff, *Cost Accounting*, Chap. 22. New York: The Ronald Press Company, 1953.

MacDonald, J. H., *Practical Budget Procedure*, Chaps. 11–13. New York: Prentice-Hall, Inc., 1939.

McNair, M. P., and E. G. May, "Department Store Expense Control," *Harvard Business Review*, vol. 31, no. 3, pp. 113–127 (May–June, 1953).

Rose, T. G., *Higher Control in Management*, Chap. 5. New York: Pitman Publishing Corporation, 1934.

29

CONTROL OF OVER-ALL PERFORMANCE

In the previous three chapters attention has been given to control within certain areas of the business enterprise. These are partial controls, since they are aimed primarily at certain functional or problem areas of the company. If the various parts and functions of the enterprise are made to conform to plans, over-all controls may not be necessary, because controls of all the parts should bring control of the whole.

At the same time, there are many reasons for employing an effective system of over-all control of performance. In the first place, for the same reasons that over-all planning must be tied to the objectives of a business and just as plans frequently apply to the business as a whole, so over-all controls must be established to assure the realization of these objectives and plans. In the second place, there are a number of plans of such major importance, such as those involving use of capital or those establishing programs of executive development, that central control may be essential to the best interests of the firm as a whole. In the third place, decentralization of authority in a company may, especially where product or territorial divisions are set up, create semiautonomous units within the larger enterprise, and these must be subjected to over-all controls if the chaos of complete autonomy is to be avoided.

To a very great extent, over-all controls are, as one might expect, financial in nature. A business normally owes its continued existence to its ability to make a profit; its capital resources are one of the scarcest of life-giving elements; and it operates in an environment in which the best single gauge of effectiveness is the dollar. Financial considerations are a binding force of the business enterprise, and financial controls the most important single objective gauge of the success of plans. To be sure, there are many other values attached to the business enterprise, such as service to society, the security and integrity of the individual, and the efficient utilization of human and material resources, but in a money economy these are usually difficult to measure as compared to the greater precision of monetary standards.

Budget Summaries

The technique of control through budgets has been discussed in Chapter 25. Perhaps the most widely used device for controlling over-all performance is the summary of budgets. Since budgets are in the first instance plans, budget summaries are an abstract of enterprise plans reduced to specific numerical terms. If complete, they furnish an excellent standard against which over-all performance can be measured.

Nature and content of budget summaries. Budget summaries are résumés of all the individual budgets of the company, reflecting all the plans of the company in such a way that sales volume, costs, profits, utilization of capital, and return on investment are brought into their proper relationship. If summarized in these terms, they serve as a useful comprehensive tool whereby responsible top management may see how the company as a whole is succeeding in its objectives.

The comprehensive nature of the final budget may be readily grasped if consideration is given to the preliminary steps required. These involve setting the sales forecast or budget and its translation into the production budget with a statement of costs, output, and attendant facilities requirements. As these are summarized, the budget maker is in a position to develop a pro forma balance sheet and statement of profit and loss to accompany the final budget. These three documents furnish a basis for the top managers of a business to consider the effect of departmental activities and plans on the business as a whole and to weigh specifically their effect in terms of the objectives of the enterprise.

Budget reports. Summaries of budgets are of limited use for control purposes without reports to show how events compare to plans. If the budget summaries are properly drawn, so that responsibility for performance under them can be easily ascertained, the issuance of reports should be little more than a listing of the data, a calculation of variances, and an explanation for major differences.

The necessity for explanation of important variances is often overlooked in budget reports, and managers are many times furnished only with figures that show the variances. Clearly, if the budget reports, whether in summary form for the enterprise as a whole or for a department or function, do not contain information as to the reasons for significant differences between budget and actual costs, the manager using them for control purposes may feel an understandable sense of frustration. The necessity for showing why budget goals are missed increases, the more comprehensive the coverage of the budget is in terms of the size and complexity of the business operations. The manager of a minor department may know from intimate acquaintance with his operations why his experience has varied from plans. But the higher in the organization structure the budget summary is prepared and presented, the less likely the manager will be to possess the reasons for budget deviations.

Especially important in making budgets operate for control purposes is the promptness of issuance of reports. It should not be forgotten that budget reports are actually historical documents, reporting what *has* happened as a comparison with what had been planned to happen. Ideally, as has been pointed out before, control should be forward looking, since the past cannot be controlled. Historical data, such as those normally found in budget reports, are useful only if it can be assumed (as is often the case) that what has happened will continue to happen. Obviously, the more promptly a report can be issued, the greater the likelihood that what has occurred will continue to represent what will occur, and the more useful the report, therefore, for purposes of control.

Focus in budget summaries. For any system of budgeting to be effective, but more particularly for the best control through budget summaries, the manager must aim his primary attention to several questions. He must first be satisfied that the budget summary is an accurate and reasonably complete portrayal of the company's plans. The budget reports and any explanation of deviations accompanying them should be scrutinized with a view to determining whether the comparison of budget and actual costs shows the real nature of deviations involved. For example, the head of one company once criticized his factory manager for being considerably over his labor budget in a month when the latter had materially reduced his labor force, with a temporary increase in expenses from severance pay allowances. A manager should focus his attention on exceptions. Minor budget differences should receive an appropriately small degree of attention. The purpose of any system of controls is to draw attention to important variations, and both the budget reports developed and the attention given to them should reflect this principle.

Above all, the manager ought never forget that budget summaries are no substitute for profitable operation of the business. There are many dangers in manipulating figures in the making of a budget and forcing revenues and expenses to conform. Moreover, budgeting is never more perfect than the planning that lies behind it, and plans, especially where drawn for long periods in advance, are subject to the imperfections wrought by change and uncertainty. There may be times when the manager must forget about his budget to meet unexpected events. Budgets are meant to be tools, and not the masters, of managerial control.

On the other hand, the value of budget summaries in providing an effective means for over-all control in the face of decentralization of authority should not be underestimated. They furnish a means whereby enterprise objectives can be given clear and specific definition and departmental plans made to contribute toward such objectives. Should the budget summary and the reports of actual events indicate that the business as a whole is not tending toward its objectives, the top managers have a convenient and positive means of finding out where the deviations are occurring. Should the fault lie not with departmental plans but with major enterprise plans, the summaries furnish a guide to making an intelligent recommendation to the board of directors or stockholders.

PROFIT AND LOSS CONTROL

Since profits are usually the key to enterprise survival and therefore a positive and definite standard against which the success of business operations can be measured, many companies have utilized the principles of the profit and loss statement for divisional or departmental control. Because this statement is a summary of all revenues and costs for a given period of time, it is in a very real sense a summary of the results of business operations.

Profit and loss control. The profit and loss statement for an enterprise as a whole serves important control purposes, largely because it shows the constituent parts of a profit or a loss for a given period and therefore is a useful map for determining the immediate revenue or cost factors that have accounted for success or failure. Obviously, in the form of a *pro forma* forecast, it is even a better control device, in that it gives a manager a chance, before the event, to influence revenues, expenses, and, consequently, profits.

But profit and loss control is usually thought of as applicable to divisions or departments of an enterprise. This technique is based on the premise that if it is the purpose of the entire business to make a profit, it should be the objective of each part to contribute to this purpose. Thus, the ability of the segment to make a profit of an expected amount becomes a standard for measuring its performance.

In the operation of a system of profit and loss control, each major department or division of the business details its revenues and expenses, normally with a prorata share of company overhead, and calculates periodically a statement of profit or loss for that division or department. In some cases the unit has its own accounting group, while in other cases the accounting statement is prepared by the company's central accounting department. In either event, the goal is to establish the organizational segment, for the purpose of profit and loss control, as a separate unit responsible for turning in a record of profitable operation in much the same way an investment or holding company might expect of its subsidiary companies.

Profit and loss control can only be applied in a practicable way to major segments of the company, since the paper work in building up profit and loss statements for smaller departments would be too heavy. It is also important to note that profit and loss control implies that the manager of the division or department has a fairly wide authority to run his part of the business as he sees fit, with profit being the primary standard of measuring his success or failure. However, many companies that could not or would not decentralize authority so broadly have nonetheless found profit and loss control to be a valuable device. The focus on profit and the sensitiveness of the organizational unit to it are worthwhile aspects of this kind of system, even though the manager has limited independence to seek profit as he wishes.

The more integrated and complete an organization unit is, the more accurate profit and loss will be as measuring sticks, and the more meaningful the control. For this reason, profit and loss control tends to work best in product or territorial divisions where it is possible to have under one jurisdiction both sales and production functions for a complete product or service. For example, it is much easier to use a standard of profit for measuring the operations of the general manager of the Buick division of General Motors than it would be to measure the work being done in the motor block boring section of the manufacturing department of this division. Units which do not produce and market a whole product or which carry on one function in a continuous-process business cannot easily utilize profit and loss controls.

At the same time, companies organized on a functional basis do occasionally employ profit and loss control. The heat treating department may produce and "sell" its service to the machining department, which, in turn, "sells" its product to the assembly department, which, in turn, "sells" a complete product to the sales department. This transfer can be carried out, although the paper work required is usually not worth the effort, and the problem of transfer price may become a source of much negotiation or of difficult executive decision. If the transfer is made at cost, clearly only the sales department would show a profit. If it is made at a figure above cost, then the question becomes one of what price to charge.

In most instances, profit and loss control is not applied to central staff and service departments. While these departments could "sell" their services, the most satisfactory and generally adopted practice is to place them under some other form of control, such as a straight expense budget.

Limitations of profit and loss control. Profit and loss controls suffer their greatest limitations from the accounting expense and paper intracompany transfers. The duplication of accounting records, the effort involved in allocating the many burden and overhead costs of a business, and the time and effort required to calculate intracompany sales can make this form of control too costly in many cases to be worth the results.

It must be recognized that profit and loss control may be inadequate as a complete technique of over-all performance control. Top managers may not wish to yield so much authority to division managers and are likely at least to wish the additional assurances involved in good budgetary control. In addition, one of the weaknesses of profit and loss control is that it, in and of itself, does not give a standard for the amount of profit desired, nor does it provide for policy controls in the area of determining product line, development, or other matters that may be of an over-all company concern.

One of the dangers of profit and loss control, especially if it is carried very far in the organization, is that departments may come to look at one another as competitors with an aggressive detachment not conducive to enterprise coordination. While this danger exists, those who control the policy of a company should not overlook the fact that in most companies there is not enough feeling of responsibility for company profit and that departments tend to develop the smugness of a monopolist with an assured market. The fabrication department that knows that its products must be "bought" by the assembly department, the manufacturing or service department that can force its output on the sales department, or the engineering group that has a monopolistic hold on both the production and sales department represent some of the most dangerous monopoly elements in the American industrial economy. Profit and loss control tends to break down these islands of monopoly. If this control is accompanied by an intracompany pricing policy which requires departments to meet outside competitive prices, top managers have an extraordinarily effective tool of over-all control.

Control Through Return on Investment

One of the most successfully used techniques of over-all control is that of measuring both the absolute and relative success of a company as a whole or of a company unit by the ratio of earnings to investment of capital. This approach has been the core of the control system of the du Pont Company since 1919 and has received much attention in recent years, with a large number of companies adopting it as their key measure of over-all performance.

Nature and purpose of control through return on investment. The yardstick involved in the return-on-investment type of control is the rate of return that a company or a division can earn on the capital allocated to it. This tool, therefore, does not look at profit as an absolute but as a return on capital employed in the business. The goal of a business is, accordingly, not to maximize profits but to maximize returns from capital devoted to business purposes. This standard recognizes the fundamental fact that capital is a strategic factor in almost any business enterprise and through its scarcity limits the progress of a business. It serves as a guide to the efficiency and effectiveness of capital utilization, whether it is enterprises, divisions, or programs that are being compared.

As the system is used by the du Pont Company,[1] return on investment involves consideration of several factors. In the first place, return is computed on the basis of capital turnover multiplied by earnings as a per cent of sales. This calculation recognizes that one division or company with a high capital turnover and a low per cent of earnings to sales may be more profitable in terms of return on investment than another with a high profit rate to sales but with a low capital turnover. Turnover is computed on the basis of total sales divided by total investment, and investment includes not only the permanent investment in plant facilities but also the working capital of the unit. In the du Pont system, investment and working capital represent amounts invested without reduction for liabilities or reserves, on the grounds that such a reduction would result in a fluctuation in operating investments as reserves or liabilities change, which would distort the rate of return and render it meaningless.

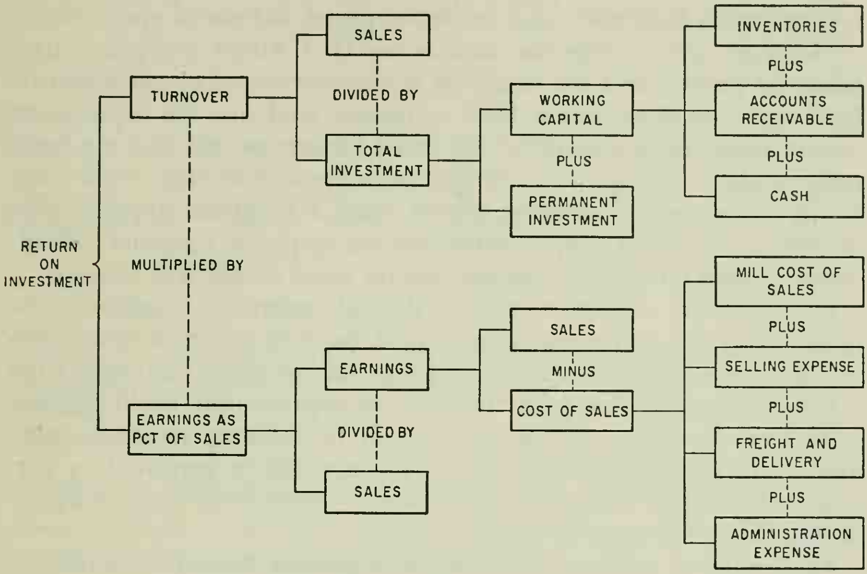
RETURN ON INVESTMENT
TURNOVER
MULTIPLIED BY
EARNINGS AS PCT OF SALES
SALES
DIVIDED BY
TOTAL INVESTMENT
WORKING CAPITAL
PLUS
PERMANENT INVESTMENT
INVENTORIES
PLUS
ACCOUNTS RECEIVABLE
PLUS
CASH
EARNINGS
DIVIDED BY
SALES
SALES
MINUS
COST OF SALES
MILL COST OF SALES
PLUS
SELLING EXPENSE
PLUS
FREIGHT AND DELIVERY
PLUS
ADMINISTRATION EXPENSE

Fig. 23. Relationship of factors affecting return on investment.

The return-on-investment technique is perhaps best summarized in chart form. Such a chart is shown in Figure 23. As can be ascertained from it, an analysis of variations in rate of return leads into every financial facet of the business. While the rate of return is the least common denominator in comparing divisions, it is one for which explanations of differences can rather easily be traced to their causes.

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[1] This system is well explained in *How the Dupont Organization Appraises Its Performance*, Financial Management Series, No. 94 (New York: American Management Association, 1950). See also the article, "How Good Is a Division Manager?" *Business Week*, Oct. 18, 1952, pp. 194–195.

In its use of rate of return as the primary control tool, the Monsanto Chemical Company, like du Pont, has employed gross asset values as the basis of investment on the grounds that, until an asset is retired from use, it produces net income.[2] Monsanto does eliminate from the investment figure excess cash and securities balances over normal requirements and investments in fixed assets that are uncompleted and not in operation.

However, other companies, such as the H. J. Heinz Company,[3] have taken the position that the return on investment should be calculated on fixed assets less depreciation. Such companies hold that the depreciation reserve represents a writeoff of the initial investment and that the funds made available through such charges are reinvested in other fixed assets or are being used as working capital. Such a treatment appears more realistic to operating people, partly because it places a heavier rate-of-return burden on new fixed assets than on worn or obsolete ones.

In any system of over-all control through return on investment, the number of ratios and comparisons behind the final yardstick figure cannot be overlooked. While improvement in rate of return can come from a higher percentage of profit to sales, an improvement could likewise come from increasing the rate of turnover by reducing return on sales. Moreover, the ratio of return on investment might be improved by getting more product (and sales) out of a given plant investment or by reducing the cost of sales for a given product.

Application of return on investment to product lines. One of the interesting applications of this control tool to a line of products is found in the case of the H. J. Heinz Company.[4] Despite having a typical functional-line organization without integrated product divisions, this company has applied return-on-investment control to its various product lines. Through grouping its many products into a number of major classifications, this company follows through with the allocation of sales, costs, and investment in fixed assets and working capital, to arrive at the same kind of rate-of-return analysis used by multidivision companies. A simplified example of these results is shown in Table 12.

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[2] For a summary of financial controls in this company, including return on investment, see *A Program of Financial Planning and Controls: The Monsanto Chemical Company*, Financial Management Series, No. 103 (New York: American Management Association, 1953). Note especially pp. 6–10 and pp. 38–43.

[3] See explanation by T. G. Mackensen in *How H. J. Heinz Manages Its Financial Planning and Controls*, Financial Management Series, No. 106 (New York: American Management Association, 1953), p. 42.

[4] *Ibid.* See especially articles by F. B. Cliffe and T. G. Mackensen, pp. 3–8 and pp. 37–45.

Table 12. *Comparative Rates of Return: Multiproduct Company*
(*In Thousands of Dollars*)

	Total sales		*Assets employed*		*Operating income* *		
	Amount	*Per cent of total*	*Amount*	*Per $ sales*	*Amount*	*Per cent return on sales*	*Per cent return on assets*
Base year:							
Product A.....	$ 39,300	40	$ 20,700	52.9	$ 4,800	12.2	23.1
Product B.....	29,500	30	16,900	57.3	2,800	9.4	16.4
Product C.....	19,600	20	8,900	45.1	2,100	10.8	23.9
Product D....	9,800	10	2,700	27.5	500	5.1	18.5
Total.......	$ 98,200	100	$ 49,200	50.1	$10,200	10.4	20.8
Current year:							
Product A.....	$ 48,100	25	$ 28,400	59.0	$ 5,600	11.6	19.7
Product B.....	96,200	50	75,300	78.3	8,500	8.8	11.2
Product C.....	38,500	20	19,500	50.7	3,900	10.2	20.1
Product D....	9,600	5	2,900	29.9	500	5.2	17.2
Total.......	$192,400	100	$126,100	65.5	$18,500	9.6	14.6

* Before interest on borrowed money and Federal income taxes.

To operate the rate-of-return yardstick for product lines, the Heinz Company has found it necessary to allocate certain expenses and assets. But these allocations apparently have not caused much difficulty. Most production costs are maintained by product, and common costs such as sales branch expenses are allocated by volume of sales. More difficulty is incurred in determining asset usage by product lines, but cash, accounts receivable, and administrative and sales facilities are allocated in accordance with sales, and inventories and factory and plant equipment are prorated to the various products on the basis of special analyses.

In addition to comparative rates of return as between products, as is indicated in Table 12, the company compares actual experience with trends for the various products (identified for purposes of simplicity as the "base year" in the table). One of the advantages of these comparisons is that the company is able to maintain a sharp look at its product lines with a view to determining where capital is being most efficiently employed and as a guide toward obtaining a balanced use of capital in the interest of maximum over-all profit. The company has been able through this approach to identify those products that are strong and established items, are new and yet unproved, or have passed their peak in growth and profitability.

Advantages and limitations of control through return on investment. One of the principal advantages of using return on investment as an over-all control of performance is that it, like profit and loss control, tends to focus managerial attention on the central objective of the business firm—to make the best profit possible on the capital available. As such it serves as a yardstick of efficiency for the company as a whole, its major divisions or departments, its products, and its planning programs. By taking attention away from mere increase in sales volume or asset size, or even from the level of costs alone, and by drawing attention to the combination of the many factors that make for successful operation, this yardstick tends to bind many aspects of financial planning and control to the central objective.

Another advantage of return on investment is that it assists materially in making control effective where authority is decentralized. It not only gives an absolute guide to efficiency but offers the possibility of comparing efficiency in capital employment, both within the company and with other enterprises. By holding departmental managers responsible for performance in terms of the dollars invested in their segments of the business, it forces them to look at their operations from the point of view of the top managers of the firm. Managers often insist on heavy capital requirements for new equipment, or drive for lower prices to increase sales, without taking into account the impact of their requests on the company as a whole. They also often feel a sense of isolation, particularly in larger businesses, with respect to their performance. By furnishing a specific and comparable guide to efficiency that reaches into so many facets of the business operation, department managers are likely to develop a keener sense of responsibility for their departmental or divisional operations, and top managers have a more definite means of holding subordinate managers responsible.

A further advantage of return-on-investment control, if it is complete in the sense of showing the many factors bearing upon the return, is that it enables managers to detect where weaknesses exist. If inventories are rising, the effect will be shown on the rate of return, or, if other factors tend to camouflage inventory variations and leave the rate apparently looking good, the very tracing back of influences will disclose the weakness of the inventory situation and open the way for consideration of a remedy.

But with all its advantages and with its increasing use by well-managed and successful companies, one should not expect this method of control to be a simple cure-all. One of the problems any firm will encounter is that of the availability of information on sales, costs, and assets and the difficulties of making proper allocation of investment and return for commonly sold or produced items. Does the present accounting system give the needed information? If not, how much will it cost to get it, either through changes in the system or special analyses? Where assets are jointly used or costs are common, what method of allocation between divisions or departments shall be used? Should the manager be charged with assets at their original costs, at their replacement costs, or their depreciated values? As can be seen, setting up return-on-investment controls is no simple task.

Another problem that faces any firm using this kind of control is the question of what constitutes a reasonable return. Comparisons of rates of return are hardly enough because they do not tell the top manager what the optimum rate of return *should* be. Admittedly, perhaps as good a standard as any is one that meets the level of competition of other firms, since, in a practical sense, optimum tends to be measured, not by an absolute level, but rather by the level of the competition for capital.

Perhaps the greatest danger in return-on-investment control is that it will lead to excessive preoccupation with financial factors either within a firm or within an industry. Undue attention to ratios and financial data can cause a firm to overlook environmental factors such as social and technical developments. It might also lead the company to overlook the fact that capital is not the only scarce resource from which a business can grow, prosper, and endure. Every bit as scarce are competent managerial talent, good employee morale, and good customer and public relations. A well-managed company would never regard any financially based control as the only gauge of over-all performance.

External Financial Auditing Control

In looking at the controls of over-all performance in the business firm, one should not fail to mention the role of the outside auditing firm. These professional accountants review the financial accounts of the business, primarily with a view to determining whether they portray with reasonable accuracy the financial condition in the light of accepted accounting principles. While the outside accounting audit is limited to financial matters and is essentially a verification of balance sheet items, the ramifications of these items are such as to extend into those aspects of the business that bear in any financial way on assets, liabilities, and net worth.

While the independent audit has a limited management-control function, so many measures of performance are based upon financial information that the integrity of the accounting system is a prerequisite to effective control. Moreover, through their interpretation and application of accepted accounting principles, the independent auditors exercise a degree of control over the operations of the business itself. Thus, a business might wish to make capital investments and charge them to current operating expenses, or it might wish to overcost a production item to show a reduction in inventories or an understatement of profits. But the outside auditing firm, by refusing to certify accounts with such deviations from standard practice, can materially affect the business policy concerned.

OVER-ALL CONTROL THROUGH INTERNAL AUDITING

In considering control devices in Chapter 25, the nature and purpose of internal auditing were discussed. It will be recalled that this, in its broadest sense, is the appraisal of the accounting, financial, and other operations of the business by a staff of auditors employed by the company itself. Practically all large companies now have internal auditing programs, although most have been established since 1940.[5]

The broad program of internal audit. Many of the companies with internal audit staffs limit their work to the verification of accounting and financial transactions, thus supplementing for the purpose of internal management the work of the outside auditing firms. In every company, this is still the primary task of internal auditing staffs. However, in an increasing number of companies the program of internal auditing is used to serve managers by checking on compliance with policies, plans, and procedures. On the basis of this check, the staff operating under a broad program of internal audit usually makes recommendations for the correction of detected deviations.

Other than in accounting and financial audits, the area in which internal auditors are especially active is that of the appraisal of procedures. Procedures have a way of becoming obsolete and are often misunderstood or disregarded, even though they may be essential to the orderly flow of a firm's activities. To guard against any serious breakdowns in procedures, especially since they typically cut across departmental lines, the careful observation and appraisal by a staff of experts can be extremely helpful. Some companies also find similar advantages in using internal auditors to check on the effectiveness of interdepartmental policies.

Many audit staffs also are useful in handling special assignments generally related to the subject matter of their audits. For example, in one company, the internal audit staff was used to assist the controller in establishing procedures for meeting price and material regulations and the requirements of profit renegotiation.[6] It also arranged for procedures to be followed in auditing government contracts and developed other procedures for controlling major construction projects.

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[5] According to a survey reported in F. A. Lamperti and J. B. Thurston, *Internal Auditing for Management* (New York: Prentice-Hall, Inc., 1953), pp. 84–86, only 9 of the 132 large companies studied had internal auditing departments in 1920, and only 58 by 1940, but all had such departments by 1950.

The contribution of internal auditing to over-all control. The internal auditing staff contributes to the control of over-all performance by assuring that accounting and financial data accurately portray the facts. The internal auditing staff, particularly if established with a broad program of audit, can also act as a means of communicating facts to management with respect to the operation of plans. Through detecting deviations, the auditors are able to inform managers of places where corrections are needed. The intelligent internal auditor, moreover, is in an admirable position to make recommendations for correcting deviations. Furthermore, the very fact a company has an effective program of internal audit will do much to cause managers and their subordinates to hew to the line of company policy and procedure. As in the case of most auditing, internal or external, there is perhaps more gain in the enhancement of care to avoid errors and departures than in the actual detection of mistakes.

But there are several limitations to internal auditing. In the first place, a complete program of internal audit is expensive, and many smaller companies may not be able to afford one. In the second place, the appraisal of a situation by an internal auditor will be ineffective if it does not result in corrective action. Too often internal auditors fail to impress the information upon the responsible manager, either because their reports are too complex, because they irritate the manager with undue attention to detail, or because they lack the ability to sell the manager on the soundness of their analysis. An internal auditor is primarily in a staff relationship to the manager responsible for an activity and, as such, he should only recommend.

The Centralized Control Unit

One of the more recent developments of an organizational nature designed to effectuate over-all control of performance is the centralized control unit. It provides for the centralization of information necessary to control, as well as many of the aspects of the managerial control function, in a staff reporting to a manager. Usually, this control unit is thought of as reporting to the president, although the concept is such that a manager at any level might have a control section reporting to him.

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[6] *A Program of Financial Planning and Controls: The Monsanto Chemical Company*, *op. cit.*, p. 20.

The importance and nature of the control unit are indicated by the following statement from a book on internal controls by two authorities in the field: [7]

> The control unit is new as a separate important top management tool. It is the latest step in the evolution of managerial controls. It is simply the gathering of all these activities into one coordinated unit under the supervision of a top executive. This places new emphasis on these functions, acknowledges their importance, and usually results in substantial economies in the costs of effecting proper control of the business. Duplication of effort, work at cross purposes, overemphasis on the importance of one function at the expense of another are eliminated. Erroneous interpretations or lack of unity of purpose, which can happen unintentionally when two people examine the same situation independently, are eliminated. The whole flow and channeling of control data from source to directive action is coordinated under uniform guidance and without extraneous motion.

The control unit in practice: the Koppers Company. The development of the centralized control unit has often been ascribed to B. B. Somervell, commanding general of the Army Service Forces during World War II, who reputedly used this technique with much effectiveness. After the war, Somervell became president of the Koppers Company, where he established a control unit that has become one of the principal patterns for this technique in American industry.[8]

At the Koppers Company the control section is conceived as an aid to the president, with the task of the chief executive that of determining what the company shall do by setting objectives and goals and the concern of the control section that of undertaking the job of determining how the company shall do these things as well as to determine how effectively they are being done. The basic concept is that the president cannot do everything his job demands of him; through the control section, therefore, he is provided with more eyes, more ears, and more hours per day. Thus, whatever the control section undertakes, it does so acting for the president.

More specifically, in Koppers the control section has five principal functions:

> 1. It determines and agrees upon programs, developing them with the assistance of the operating and staff departments concerned and reviewing objectives and programs in the light of their continued attainability and desirability.

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[7] Lamperti and Thurston, *op. cit.*, p. 95.

[8] T. J. McGinnis, *The Control Section as an Aid to Management* (Pittsburgh: Koppers Company, Inc., no date). This booklet describes in interesting detail the organization and functions of the control unit at Koppers. The material in this section is drawn from it.

2. It guides and coordinates performance of the division managers through constant review of the organization of the company, of policies affecting the company generally, and of procedures involving actions between operating divisions and staff departments.
3. It appraises results against the standard of the programs through monthly reports on operations and through audits of the financial and nonfinancial factors involved.
4. It assists the president in the correction of unsatisfactory conditions by locating and analyzing troublesome conditions and by preparing recommendations of remedial action.
5. Subject to the prior demands of the president's job, it provides control service to other units of the company as requested, with respect to organization planning, policy development, procedure design, program development, information clearance, special reports, mediation, coordination, special studies, control installations, control training, and report design.

Koppers encourages the development of control sections at levels below the office of the president, provided that the task of the head of the division or department is important enough and the size of the division or department sufficient to require internal control activity. In this connection, an attempt is made to develop an effective functional liaison between control units at the various levels for the purpose of expediting and improving the quality of the control work undertaken.

Koppers also emphasizes that a proper understanding of the control section's organizational relationship is essential to effectiveness. In all its work, the top-level control section acts as an assistant to the chief executive but exercises no authority whatever over any part of the organization. On this point the company makes the statement that "should the attitude be taken . . . that it is a super-management agency with power to control and direct in itself, its value is lost and it will very likely become a liability rather than an asset."[9] However, when the breadth of duties of the control section is considered, the fact that it acts only in a staff capacity to the president would appear to be difficult to realize in practice. The rather unusual extension at Koppers of the office of the president in the control section could hardly help giving it a position approaching the authority of the chief executive officer himself. The president's chief line lieutenants are doubtless not required to accept the planning and control recommendations of the control section. If effective in practice, lack of line authority would force upon the control section the staff task of recommending and selling ideas.

The control unit: other types. While the pattern of the Koppers Company control section is generally typical of those companies that have gone far in this direction, there are control units that vary from this pattern to a marked degree. In some companies, they are little more than a centralized cost- and financial-data dispensing agency. In others, the unit combines accounting and statistical work, furnishing the various parts of the company with data needed for planning and control. In still others, these functions may be combined with special reporting activities.

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[9] *Ibid.*, p. 16.

One type of control unit organization that differs materially from that at Koppers is the kind of department that centralizes *activities* with respect to planning, budgeting, methods and procedures engineering, statistics and reports, internal auditing, and organization and policy manuals.[10] While the *breadth* of coverage of such a control department does not differ substantially from the Koppers pattern, it is important to note that the Koppers practice is designed as an aid to the president primarily and that it envisages control units for the assistance of other key executives if that is found to be necessary. In those control units that centralize activities, the concept is that the company will have but one control department and that the activities will be, to a very great extent, vertically integrated, in the manner of the typical centralized service department. This kind of control section organization is particularly dangerous because it tends to concentrate the tools of management in a place beyond the reach of lower managers.

The control unit and the controller. There is a tendency in many companies and among many controllers to merge the activities of the control unit with those of the controller, who has historically been the chief accounting officer of a company. Since statistical and financial data are of key importance to the operation of control and since they usually originate in the controller's department, the tendency to expand his functions to include policy, procedural, and other planning and control matters is not unnatural.

However, it is significant in the Koppers plan that the control section is separated from the departments of finance and accounting, as it is from any of the other functional departments of the business. There is some sense in so doing, for there is only slightly more reason for making the controller's department the control section than in using the personnel department for this purpose, or the legal department, or the purchasing department. The danger of expanding the controllership function to include the area of general planning and control is that the controller may tend to look at his task through the eyes of accounting or finance only. Clearly, the kind of control section established at companies like Koppers has a much broader approach to the problem of management, and while accounting and finance are an important part of it, there are many other facets requiring consideration and representation.

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[10] J. B. Thurston, *Coordinating and Controlling Operations* (New York: Funk & Wagnalls Company, 1948), p. 11.

An appraisal of the control unit. One of the difficulties encountered in appraising the control unit as a device for control of over-all performance is that it means various things to various people and companies. The control concept as used by Koppers has much to commend it. In a sense, it is not so much a control organization as it is a special staff to an executive. If it can maintain a staff position—and this is difficult—and if it does not take away from the executive his feeling of responsibility for planning and control, it can be a useful device for overcoming the limitations of time and attention that every top executive feels, especially in larger industrial enterprises.

Even in this case there is some question whether there may not be in practice too much centralization of planning and control activities and whether some of these activities might not be as well handled by assigning them to responsible line subordinates. If such a device in any substantial way leads either the superior manager or the subordinate managers to feel that they are not responsible for planning and control within their departments, it can lead to the destruction of effective managerial functions. It is noteworthy in this connection that Koppers has attempted to avoid a centralization of planning and control functions by attaching its control section clearly to the president, making it definitely staff to the president, and encouraging other managers who need such assistance to establish lower-level control units.

The control-unit concept becomes dangerous to effective management when *activities*, such as financial statistics, planning reports and proposals, and procedure and policy making, are concentrated in a control department. While such a department may service the office of the president well and may be able to effect savings through centralization of activities, it may fail in assuring that lower-level managers have both the information and the authority to do an effective job. Any top manager should be careful that he does not take the title of "controller" too literally or set up a control department with too much concentration of activities.

The Enterprise Self-audit

J. O. McKinsey, who, approximately a quarter of a century ago, achieved an outstanding position in the area of management, came to the conclusion in his analysis of problems that a business enterprise should periodically make a "management audit," an appraisal of the entire enterprise in all its aspects in the light of its present and forecast environment. This type of audit has been referred to by Goetz as "much the most comprehensive and powerful of these problem-seeking techniques" because it seeks in an over-all way "to discover and correct errors of management."[11] While McKinsey has referred to this appraisal as a "management audit," it is in the nature of an audit of the entire enterprise.

The nature of the enterprise self-audit. The enterprise self-audit is a kind of appraisal of the company's position with a view to determining where it is, where it is heading under present programs, what its objectives should be, and whether revised plans are needed to meet those objectives. One of the difficulties with most enterprises, business and otherwise, is that their objectives and policies become obsolete. If the enterprise is not made to change its course to suit the changing social, technical, and political environment, it loses markets, personnel, standing, and other requirements for continued existence. The enterprise self-audit is designed to force managers to view their position and progress in this light.

The procedure of the enterprise self-audit. This audit may be made annually or, more likely, once each three or five years. In undertaking it, the first step is to study the outlook of the industry in which the firm is engaged. What are the recent trends and the prospects? What is the outlook for the product? The location of the markets? What effects are technical developments having on the industry? What changes in demand may be expected? What political or social factors may affect the industry?

A second step in the enterprise self-audit is to appraise the position of the firm in the industry both currently and in prospect. Has the company maintained its position? Has it expanded its influence and markets, or has competition reduced its position, and what is the outlook for competition in the future? To answer such questions, the company might undertake studies to ascertain competitor standing, the development of competition, customer reactions, and other factors bearing on position within the industry.

On the basis of such studies, the next logical step for the company would be to reexamine its basic objectives and major policies with a view to where the company wishes to be in, say, five or ten years.

After reexamination of basic objectives and major policies, the company is then in a position to audit its organization, policies, procedures, programs, facilities, financial position, personnel, management quality, and other factors bearing on its ability to exist and thrive. With this analysis, it would be expected that significant deviations from objectives would be discovered and that many major and minor plans for the future would be revised.

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[11] Billy E. Goetz, *Management Planning and Control* (New York: McGraw-Hill Book Company, Inc., 1949), p. 167. For a discussion of the management audit, see pp. 167–171.

The contribution of the enterprise self-audit. One of the deficiencies of most top business managers is that they either do not have or do not take the time to think in terms of the company's future and evaluate over-all performance with a view to determining whether this performance is consistent with long-range objectives. The enterprise self-audit has the distinct advantage of forcing on top managers an appraisal of over-all performance not only in terms of current goals but in terms of long-range objectives. The top managers who expend the mental effort required for this kind of audit will almost certainly be well repaid, for they will doubtless be surprised how many day-to-day decisions will be simplified by a clear and confident picture of where the business is attempting to go.

SELECTED REFERENCES

Bradshaw, T. F., and J. V. VanPelt, "The Place of the Controller in Management Planning and Control," *The Controller*, vol. 20, pp. 472 ff (October, 1952).

Brink, V. Z., *Internal Auditing*. New York: The Ronald Press Company, 1951.

Goetz, B. E., *Management Planning and Control*, pp. 167–175. New York: McGraw-Hill Book Company, Inc., 1949.

Heckert, J. B., *Business Budgeting and Control*. New York: The Ronald Press Company, 1946.

Holden, P. E., L. S. Fish, and H. L. Smith, *Top-management Organization and Control*, Part C, Sec. 17. New York: McGraw-Hill Book Company, Inc., 1951.

How H. J. Heinz Manages Its Financial Planning and Controls, Financial Management Series, No. 106. New York: American Management Association, 1953.

How the Dupont Organization Appraises Its Performance, Financial Management Series, No. 94. New York: American Management Association, 1950.

Lamperti, F. A., and J. B. Thurston, *Internal Auditing for Management*. New York: Prentice-Hall, Inc., 1953.

A Program of Financial Planning and Control: The Monsanto Chemical Company, Financial Management Series, No. 103. New York: American Management Association, 1953.

Rautenstrauch, W., and R. Villers, *Budgetary Control*. New York: Funk & Wagnalls Company, 1950.

Reports to Top Management for Effective Planning and Control. New York: American Management Association, 1953.

Rowland, F. H., *Budgeting for Management Control*. New York: Harper & Brothers, 1945.

Thurston, J. B., *Coordinating and Controlling Operations*. New York: Funk & Wagnalls Company, 1948.

30

CONTROL OVER THE QUALITY OF MANAGEMENT

In the preceding analysis of control the common point of departure was the variety of approaches that managers follow in order to make certain that events conform to plans. Underlying the treatment of control is the inference that, if enterprise managers had confidence that their plans would be automatically effected, the executive function of control would be unnecessary.

At the base of this approach to control is the principle that events are directed and influenced through people. It is generally recognized, for instance, that a poor educational system cannot be controlled by criticizing its product, the unfortunate graduate; that a factory which turns out a number of inferior products cannot be controlled by their consignment to the scrap heap; or that a firm which experiences an untoward number of customer complaints cannot be controlled by ignoring the complainers. The controllable cause of unhappy events lies at the door of one or more *persons* who made incorrect decisions, whether these concerned the quality of raw materials, reliance upon too few resources, improper installation of equipment, or other sufficient cause. Any hope of correcting unsatisfactory results lies in changing the *future* actions of the responsible person through such means as additional training, modification of procedures, or new policy. This is the problem of controlling the quality of management.

There are, then, two approaches to the manipulation of events. The older and almost universal procedure involves tracing the cause of an unsatisfactory performance back to the person responsible for it, with a view to his correcting practices so that future events will conform to standards. Such an approach may be called "indirect control." Another alternative is the newer procedure of developing managers in the first instance who will follow sound principles and thus remove the cause of controllable but undesirable events to the extent that they lie in the quality of management. This approach is referred to here as "direct control."

INDIRECT CONTROL

Indirect control procedure. Indirect control rests upon the practice of analyzing undesirable events with a view to tracing their cause to the responsible person and making corrections so that future events will be acceptable. In every enterprise many hundreds and even thousands of standards are developed as bench marks for the purpose of comparing the actual output of goods or services in terms of quantity, quality, time, and cost. Excessive deviations from established standards indicate that a decision must be made whether to search for the personal cause and correct it by such techniques as have been already discussed.

Limitations of indirect control. The shortcomings of indirect control derive from certain assumptions upon which the technique rests and from the cost of the indirect procedure. It is assumed (1) that performance can be measured; (2) that personal responsibility for performance exists; (3) that personal responsibility can be detected; and (4) that the person responsible will take corrective measures. Thoughtful consideration of these assumptions, however, will raise many questions about their validity.

The Assumption that Performance Can Be Measured. At first glance, almost any enterprise appears to be a jungle of controls. Input, output, cost, price, time, complaints, and quality are the subject of numerous standards. The standards themselves may be variously viewed as correct, acceptable, or better than nothing. They exist in terms of time, weight, tolerances, averages, ratios, dollars, and indexes. Such a thick coverage surely should provide all the control any firm could want. But closer analysis will reveal shortcomings of two types. In the first place, many important aspects—the ability of a manager to develop potential managers, the effectiveness of research, the quality of creativity, foresight, and judgment in decision making—can hardly be measured mathematically.

The second limitation is related to the location of the control. Managers are well aware that strategic points exist in the process of acquiring input factors, manipulating them to produce a finished product, and selling and delivering the enterprise product to customers. All the input factors pass through critical stages in this process. In a factory operation, for example, strategic points would include receiving inspection, inspection at the end of each assembly process, shipping, and billing. These points are critical in the sense that effective control at such places will minimize costs. If no data are gathered as the goods pass over these strategic points in a process, no effective control can be developed. No amount of duplicative controls at other points can be substituted.

The Assumption that Personal Responsibility Exists. It is not difficult to demonstrate that sometimes no manager is responsible for poor results portrayed in control reports. Government restrictions imposed in 1950 on the use of copper resulted in many poor-quality products, such as automobile bumpers. Scarcity of a particular fuel may result in reconversion to older and less economical sources of power. Inadequate working capital may result in an inability to take advantage of quantity discounts and in high-cost operation. And market areas may be seriously depopulated by developments quite foreign to the operation of a firm. Many of the most serious negative results of enterprise operation are due to forces quite beyond the control of the firm. Consequently, the basic assumption that there is within the firm someone personally responsible for poor results is often quite without basis in fact.

The Assumption that Personal Responsibility Will Be Traced. There are important restraints on a manager who wishes to discover why a certain event does not conform to standard tolerances. One is the cost of an investigation. Whether the manager in question undertakes the inquiry himself or delegates it to some subordinate, there are always costs in executive time spent with other managers in ferreting out actual causes. Untoward scrap losses, for example, may call for meetings attended by men representing quality control, production planning, engineering, purchasing, and manufacturing.

Another restraint is the time factor, which often serves to make the recall of facts quite difficult. In the face of these drawbacks the manager may decide that the cost of investigation exceeds any benefit that he may derive. It is this fact that often precludes investigations into situations which are clearly violations of standards and yet which appear too unimportant to call for a full-scale inquiry.

The Assumption that the Person Responsible Will Take Corrective Steps. The final question raised by indirect controls is whether the responsible person, once identified, will take the necessary steps to eliminate the difficulty. High production costs, for example, might be traced back to a sales manager who insists upon "slight" product modifications on the assumptions that the customer will be easier to sell and that no change is "really" being made in a production run. Fixing the responsibility does not always, or even frequently, lead to correction. If the sales manager is a powerful member of top management, there is little question but that a subordinate investigator may be intimidated; the president may attempt to mediate between sales and production executives; and the sales manager will remain as unreconstructed as ever. While great effort is made to correct subordinate managers, it is sometimes very difficult to correct the superior executives.

The Causes of Negative Deviations from Standards

A negative deviation may be considered as an indication that performance is something less than good or normal or standard. The indicators may be in terms of cost, price, personnel, man-hours, or machine-hours. However they are measured, negative deviations show that events are not conforming to plans.

At this point it is desirable to analyze the causes of negative deviations. It will be assumed that the standard in question is correct, although it is obvious that an important cause for a negative deviation is an incorrect standard, as will be discussed later. The more fundamental issue is the reason plans do not work out. They fail because of (1) uncertainty; (2) the manager's lack of knowledge and experience; and (3) the manager's poor judgment.

Uncertainty. Uncertainty of future events is the cause of most negative deviations, if for no other reason than that it contains the greatest variety of elements that affect a situation. The forces that affect a given plan may be grouped into facts, risk, and uncertainty. Facts are composed of known elements, such as number of persons, cost, or machine capacity. Considerably less is known about the elements that comprise areas of risk. Insurable risks are readily converted to factual status through the payment of a known premium. Noninsurable risks are necessarily included in a business decision on the basis of the probability of their occurrence. The sum total of facts and risk areas is small, compared to that of the areas of uncertainty, which include all those elements about which nothing is certain and little or nothing is known. For instance, the success of a plan to manufacture aluminum pistons will depend not only on the correct assessment of known facts and risks but also on such uncertainties as world conditions five to ten years from now, competition of known and unknown metals, or power technology, which may eliminate all piston prime movers. Not even the probability of incidence of such forces can be estimated. Yet their occurrence can wreck a plan.

The manager's lack of knowledge and experience. Plans may misfire because of errors attributable to managers who have inadequate knowledge and experience. Men may be appointed to managerial posts without their having the necessary requirements for them. On-the-job experience in managment is also a highly important matter, and the higher in the organizational structure one is placed, the more broad the practical sources of information and training must be. Long years of experience as an engineer, a sales manager, a production executive, or a controller may be of little avail in qualifying a man for a position as a general officer.

Poor judgment. Good judgment is the mark of a mature man who intelligently applies his educational and business experience. He is known for his common sense. Unfortunately, some managers in high places display poor judgment. Even though they have gone through the motions of formal education and have had years of practical experience, they are seemingly incapable of reaching sound decisions. They make incorrect strategic decisions about such matters as product lines, expansion policy, innovation, or decentralization. At the top level, where decisions of this nature are made, the chance of correction through separation from the firm is very small. On the other hand, errors of judgment at the middle and lower echelons of the organization structure are normally followed promptly by correction, demotion, transfer, or separation.

Significance of the causes of negative deviations. The causes of negative deviations will often determine whether control measures are possible. From the point of view of personal responsibility, managerial errors caused by unforeseeable events cannot be corrected. The fixing of personal responsibility by indirect control techniques is of no avail in such situations. If the cause of error is found to be poor judgment, on the other hand, whether due to inadequate education or experience or the failure of a manager to use appropriate sources of information in his decision-making process, there is hope that correction can immediately be made. He may improve his formal education, he may be transferred in order to acquire a broader experience, or he may be cautioned to take stock of these matters when he makes decisions.

From this discussion, an interesting question arises. How often can negative deviations from standard be corrected? At the present time, nothing is known about this matter. But it is vital. If, for instance, errors in decision making are subject to correction only 40 per cent of the time, then the effort made to place responsibility is of no avail 60 per cent of the time. Such a ratio is likely to place on indirect controls an insuperable burden of expense.

Another question may be raised as to whether indirect controls are efficient costwise in placing personal responsibility for deviations that can be corrected. In other words, are there other ways to approach the problem of effective and efficient control?

The Theory of Direct Controls

The theory of direct control embraces the idea that personal responsibility for unacceptable deviations from standards can be fixed through the application of principles of management. It draws a sharp distinction between performance reports, which will be essential in any case, and the process of fixing responsibility. It proposes to achieve the latter directly by determining whether individual managers act in accordance with established principles in carrying out their functions.

It is possible that the theory of direct control was vaguely perceived by Fayol. He had a mature and yet practical understanding of management. He said in a 1925 interview with the editors of *Chronique Social de France* that the best method of looking at an organization and determining the necessary improvements was "to study the administrative apparatus. . . . One can ascertain immediately that forecasting and planning, organization, command, coordination and control are properly provided for, that is to say that the undertaking is well administered." [1]

Assumptions of the theory of direct controls. The theory of direct controls rests upon four assumptions: (1) that qualified managers make a minimum number of errors; (2) that the quality of managers can be determined; (3) that the use of managerial principles can be evaluated; and (4) that general principles of management are discoverable.

Qualified Managers Make Minimum Errors. J. P. Morgan has often been quoted as saying that good managers are right two-thirds of the time. Perhaps his allowance for error was made in deference to the exigencies of uncertainty. In any case, this is an area where personal responsibility cannot be fixed. The managers who make wrong decisions because of poor judgment can and should be removed from their executive duties. On the other hand, all other errors, exclusive of those resulting from uncertainty, can be avoided.

The Quality of Managers Can Be Assessed. The basic argument for the proposition that the quality of managers can be assessed was set forth in Chapter 15. An analysis of the managerial job provides the information upon which the qualities necessary for its accomplishment can be deduced. Many business firms within the writers' experience have made applications of this procedure with effective results.

General Principles of Management Are Discoverable. One of the purposes of this book has been to draw together the principles of management and relate them to the executive functions. The achievement has been inadequate in the sense that applicable principles for some functions are well known, whereas those for other managerial activities are not yet fully developed. The principles of planning rest upon the logic of scientific methodology and the data of business economics. The principles of organization are quite comprehensive. Many of the principles applicable to the other managerial functions require considerably more research in social psychology and business practice. Nevertheless, sound practices in many phases of staffing, directing, and controlling are widely publicized and available.

The Practice of Management Principles Can Be Evaluated. The evaluation forms of a type suggested in Chapter 16 and widely used in industry provide the basis for the periodic measurement of individual managers. Particular attention is thereby given to the degree to which the manager carries out the planning process logically, observes the principles of organization, and carries out his staffing, direction, and control functions in accordance with principles and the best practice.

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[1] Quoted by L. Urwick in his foreword to *General and Industrial Management* (New York: Pitman Publishing Corporation, 1949), p. x.

Advantages of direct controls. The procedure for directly controlling the quality of managers, and thus minimizing corrective errors, has several advantages. In the first place, greater accuracy is achieved in assigning personal responsibility. The periodic evaluation of managers by a committee of superiors is practically certain to uncover existing deficiencies and provide for specific training to eliminate them.

Secondly, direct control quickens and makes more effective corrective action. Knowing that past errors will be uncovered in the periodic evaluation, individual managers will be quick to determine their personal responsibility for bad decisions and to make voluntary corrections. For example, a report of excessive scrap in a particular department will cause its foreman to determine quickly whether it was due to poor direction of subordinates or to carelessness. The same report will cause the chief inspector to see whether his men acted properly, the purchasing agent to check the material purchased with engineering specifications, and the engineers to determine whether appropriate material was specified. All this action is immediate and voluntary. Any manager who concludes privately that he was in error will certainly do his best to eliminate the possibility of a future recurrence, for he knows he will otherwise be graded down in his next evaluation.

The third advantage of direct controls is their potentiality for lightening the burden now carried by indirect controls. The latter would be completely relieved of the expense of determining personal responsibility. This is a net gain, since the periodic evaluation of managers is already part of the staffing procedure. The amount of the savings involved is as yet generally unknown.

APPRAISAL OF MANAGERS: DIRECT CONTROL

In a broad sense, the principles of management may be used as a check list in evaluating the skill of individual executives. For such evaluations, no services of outsiders or even of specialist groups within the firm are required. Each superior manager can carry on the activity himself, providing of course, that he first understand the principles of management.

Control over organization. The superior who wishes to determine the organizing skill of his subordinate would make a methodical check of the way he has grouped activities and delegated authority. The departmental chart would reveal information on the first point. Grouping can be checked against the principles of similarity and association, and the reasons for any nonconformance can be elicited. The delegation of authority can be compared with the assigned duties in order to determine whether the incumbent has the power to discharge his responsibilities. At the same time, the clarity, completeness, and currency of the authority and the duties for which a subordinate is responsible can be determined. Finally, the superior will wish to evaluate the organization balance and the degree to which the subdepartment is overorganized. Both are important bench marks for measuring the subordinate's understanding of the relationships of those who report to him and of his propensity to create an empire and red tape through too much formal organization. If the superior wishes, he may even develop scales for reporting his convictions on each point of the investigation.

Control over staffing. The authority of a manager over the selection of his subordinates is always affected by the degree to which the staffing function of the firm is formalized. It is typical that large-scale enterprises have centralized the function to the extent that procedures relating to recruitment, selection and training, and minimum qualifications are predetermined for each manager. In small and middle-sized firms, on the other hand, the individual managers usually have to invent and implement their own procedures.

The superior who wishes to assess the ability of his subordinate to carry out his staffing activities keeps in mind several key points. He will examine the job profile of each person reporting to the subordinate to see whether it is current and whether the distinctions drawn between the ideal man-specifications are clear and pertinent. If the selection procedure is not formalized, the superior will inquire carefully into the practices of his subordinate in this regard. The extent to which these procedures are logical, practical, and in line with accepted practices is of special significance.

Another key point for investigation is the extent to which the subordinate temporizes in filling positions. The tendency to procrastinate, to make temporary assignments, to put off reaching a decision is often fatal to any operation. The alternative is not a hasty decision. Rather, it involves the weighing of all relevant factors and making a prompt decision. A show of firmness at this point is vital for the maintenance of morale.

Although the importance of achieving a balanced staff is generally recognized, the superior who looks for this characteristic must proceed with special care. Balance is difficult to define. It is the resultant of such personal characteristics of a group of subordinates as their age distribution, varied experience, and relative promotability. A similar concept of the balanced staff of managers was held by L. C. Sorrell, when he described it as composed of "those who will achieve, those who are achieving, and those who have achieved." [2] The dangers from lack of balance are obvious. A group of sexagenarian managers may possess wisdom but little drive or imagination. A group of managers in their prime may be exceedingly effective in the short run but dangerous to the long-run welfare of the firm because they often fail to provide for the future managerial needs of the enterprise. And a group of young managers tends to lack the wisdom that tempers undue risk taking.

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[2] From an early class lecture.

The superior will not overlook the achievement of his subordinate in developing promotable personnel. Enterprises of varying size will weight this factor differently. The large-scale firm possesses the capacity to place qualified men, but it is rare indeed that smaller firms can satisfy the demand for promotion of qualified candidates. Consequently, the superior in the large firm will expect those who report to him to develop a planned program of training for their successors. It is of little matter that such people may be promoted to managerial posts in other departments. The important thing is that the future of all firms is tied to their success in developing promotable people, and it is the responsibility of every manager to carry his share of the training process.

The analysis of these factors will permit the superior to reach a sound decision about the strength and weakness of each subordinate manager in his staffing function. The personal responsibility of each for shortcomings, as well as superior performance, can be determined with assurance because the evidence is available and the liability for existing practices unquestioned.

Control over direction. Those attempting to determine the manager's ability to direct those who report to him need to proceed with extreme caution. There are many ways by which subordinates may be guided and supervised. Indeed, the choice of procedure often involves the personality of all who are involved, including the superior manager.

One of the first points of inquiry concerns the job knowledge and the methods of its achievement on the part of all subordinates. The extent to which a manager has trained his subordinates in the performance of their duties and the quality of the supervision he gives them can be determined readily.

A second point of evaluation concerns the effectiveness of communication both within and without the department. The manager who has insisted that his subordinates know the relationship between their activities and those of others throughout the enterprise, who has insisted that they develop effective means of coordination and keep their superior informed, will find his ability to direct rated highly.

Finally, a manager can be rated on such matters as his intelligent use of the grapevine, his insistence upon a high standard of business ethics and personal morality, and his ability to develop loyalty and personal integrity in his subordinates.

Control over planning. A high degree of exactitude can be reached by a superior who proposes directly to determine the planning ability of a subordinate manager. That this is so is mainly due to the fact that planning is a logical process, calling for clear definition of objective and thorough understanding of planning premises. The subordinate can easily supply evidence that he has thought through such matters. Similarly, the documentation of alternative plans for achieving a given goal will reflect the care with which the selected plan was chosen. The superior can inquire into the harmony that exists between plans. And he can discover whether attention has been given to building flexibility into operating plans.

Consideration of these strategic matters will enable the superior manager to evaluate his subordinate with respect to knowledge of good technique and ability to use effective procedures. Estimates based upon these specific points can have a high degree of validity.

Control over controlling. The phrase "control over controlling" is by no means redundant. If controlling is thought of as relating to the determination of success in planning, the superior can inquire into the means used by a subordinate to measure the results of planned activity. Good judgment will be reflected in the choice of standards which are significant and properly located and which avoid overlapping and obsolescence.

With a high quality of management elicited through direct control methods, performance reports will be used primarily to call attention to the occasions when, largely because of uncontrollable circumstances, plans and programs are missing their objectives, rather than merely to detect responsibility for disappointing personal performance. The manager will act either to get the program back on its feet or to approve changes in the light of new conditions. His proficiency in this matter may be tested in terms of the promptness of his moves, their suitability to the circumstances, and the success they achieve.

Finally, the superior will examine his subordinate's attention to the review and revision of standards. These are typically based upon average performance in terms of cost, output, or man-hours. Although the practitioners always claim that standards are subject to change as needed (as they are), nevertheless, the enormous job of changing them leads to understandable procrastination. Somehow or other, the relativity of standards tends to be forgotten by engineer, accountant, and statistician: there is an irrepressible tendency to view them as absolutes. Every manager needs a thorough understanding of the nature of standards so that he will be continually on the alert for evidence of their questionable applicability.

Prerequisites for the successful use of direct controls. The adoption of direct control procedures must await an understanding of the executive functions by those in managerial positions. The superior who wishes to proceed in this manner needs a thorough understanding of the managerial job and the principles by which it is accomplished. He must also see that his subordinates understand these matters. This need is imperative if they are to be evaluated in terms of their proficiency in discharging their responsibilities. Such an understanding is not achieved easily. The principles can be learned in universities staffed by men with business experience, through on-the-job experience, through personal training by the superior, and by means of constant self-education through reading and professional associations.

The evaluations made by superiors are necessarily subjective in nature. Consequently, there is a continuing problem of equalizing the appraisals made by several managers. It would not do for one man to be chary with superior ratings, while another uses the category often. Business firms such as the United States Rubber Company and the Radio Corporation of America have tackled this problem either by requiring a three-man rating team or by providing for a review procedure. It is probable that there will always be some question about the comparability of rating results as between managers. In the long run, of course, the word gets around that a particular manager has rated a subordinate "good" who is comparable to another whose superior has rated him "excellent."

The point should be made that this difficulty with subjective ratings is not peculiar to direct control. It is equally present in indirect controls. The apparent objectivity of the latter is extremely misleading and can be essentially false.

The psychological advantage of direct control is most impressive. The feeling of subordinates that superiors do not rate fairly, rely on hunch and personality, and use improper scales is almost universal. But the adoption of direct control tends to remove this disability. Subordinates know what is expected of them, understand the nature of managerial activity, and feel a close relationship between performance and measurement. The intelligent manager will reciprocate these feelings because, for the first time, he will know what he is expected to evaluate in subordinates and will have a tool for doing so.

Appraisal of Management: American Institute of Management

The American Institute of Management, founded and operated by Jackson Martindell, is engaged broadly in the area of management education. One of its achievements is the development of a procedure for the direct evaluation of the management of enterprises. This audit involves an explanation of the principles of management as understood by Martindell and the construction of an extensive questionnaire, designed to provide evidence for the determination of the extent to which a particular firm operates in accordance with these principles.[3]

Principles of management. In Martindell's view, the fundamental principle of management is "unflinching control." [4] He speaks of control as the essence of what a management auditor must search out. The achievement of control is apparently accomplished by managers to the extent that they adhere to the following principles:

1. Intimate knowledge of a company's officers is indispensable for appraisal purposes.
2. An outside board of directors is to be preferred.
3. Where authority is concentrated and who exercises it are questions of paramount importance.
4. The product-division type of organization is a true expression of large-scale business.
5. Teamwork is of the essence in the modern corporation.
6. Financial management should always lean toward conservatism.
7. Efficiency and production may determine the whole future of the enterprise.
8. Management gains by giving others the main fruits of improved technology.
9. Management must foresee changes in its market.
10. Management strives to minimize distribution costs.
11. Profit may be the corporate objective, but service is the means of achieving it.

While the institute may take some exception to this enumeration and formulation of its principles, they are deduced from *The Scientific Appraisal of Management*, where they appear in descriptive form without any apparent attempt at exact formulation. It is believed that this enumeration is a fair reflection of Martindell's thinking on this subject.

The term "principle" has been used throughout this book as a fundamental truth. With this definition in mind, it is apparent that the essential quality of universality of application is not characteristic of certain of the above principles. For instance, to state that large-scale business is expressed through a product-division type of organization structure is arbitrary. It is customary to define scale in terms of volume of sales, total assets, number of employees, or ability to secure the economies of division of labor. By any of these measures one may find individual large-scale companies employing functional, customer, territorial, or product bases of organization, or any combination of them.

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[3] Jackson Martindell, *The Scientific Appraisal of Management* (New York: Harper & Brothers, 1950). Statements of fact relative to Martindell's principles and questionnaire are taken from this source.

[4] *Ibid.*, p. 267.

Practicing conservative financial management may sound impeccable; yet the basis for its formulation appears to be unsound. Martindell seems to have a strong bias against corporate borrowing as implied in the statement "superior management does not borrow on long term except as a last resort." [5] His whole discussion of the subject tends to place him at variance with business finance theorists and practitioners.

The principle that management gains by sharing the fruits of improved technology is also subject to question in at least one major aspect. Obviously, from a purely profit point of view the important consideration in this case is the elasticity of demand for the product. Martindell must assume that demand is relatively elastic in order to be right. But it need not be. If the demand facing an individual firm is fairly inelastic, it will find that the most profitable course lies in limited sales at higher prices.

The remaining principles cover the subjects of organization, coordination, cost of operation, and sales management. The treatment of these elements is unique, so much so, in fact, that the reader will be concerned about the extent of the coverage of the implied subject matter. For instance, authority is approached from the viewpoint of where, not why, it is concentrated; organization from the point of view of product-division type; the board of directors from a consideration of the inside-outside question; and teamwork by whether it exists, not how it is achieved. One cannot deny the importance of each point made. But the formulation is specific rather than general, and exclusive rather than inclusive.

Questionnaire on management. From his statement of the principles of management, Martindell has constructed a list of 301 questions, which he employs as the basis for reaching a decision about the quality of management of a particular firm. The questions are put to corporate officers; analysts secure answers from both inside and outside sources; and inside information is confirmed with outside information in areas involving judgment.

The questionnaire is organized in ten classifications. The number of questions under each class varies from twelve in the section "Fairness to Stockholders" to seventy-six in "Production Efficiency." It is difficult to report an adequate sample of the questions. They vary from one extreme to another in terms of objectivity, generality, and the possibility of developing measurable information. The following are examples: [6]

> Has the fundamental nature of the business ever changed? How, when, and in which ways?
>
> To what extent does the company operate through subsidiaries?

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[5] *Ibid.*, p. 272.

[6] *Ibid.*, pp. 281–294.

Has the company always kept itself in a highly liquid condition?
Have dividends been so large as to prevent an adequate rate of growth of surplus?
Are inventories on a Lifo basis?
Is the research department physically separated from the production plants?
Is there a dissenting minority on the board?
What has been the record of break-even points?
Are the company's plants unionized?
Does the company sell through wholesalers, distributors and/or dealers?
What are the personal characteristics of the boss?

The apparent objectivity of these questions can be extraordinarily misleading. A firm can certainly say whether it is unionized or not, but what of it? The institute needs to decide whether to allow a given number of points for the answer, and such a decision may be highly questionable. Corporate officers would also have trouble deciding what such terms as "adequate" and "highly liquid" actually mean. Martindell does not overlook this matter. He says that the employment of the questionnaire "has introduced objectivity into a subjective process." [7] But until the reader is convinced that there are no important terminological difficulties and that scientific methodology is followed in subjectively evaluating the information elicited, he can have only limited confidence in this procedure.

Conclusion. The attempt of Martindell to evaluate management directly is extremely interesting. It does represent a pioneering attempt to apply the audit approach to the quality of management, and, as such, the program is deserving of praise. But at the present stage of its development, the institute's procedures rest on unfirm ground. The principles of management employed are improperly stated, terminological difficulties have not been solved, and scientific appraisal cannot be made until the rules employed by the institute for the subjective evaluation of the information acquired are made specific and publicized.

Appraisal of Management: American Management Association

The American Management Association is supported by enterprising business and professional leaders with a view to the dissemination of management education. It conducts many conferences and a large number of workshop classes for top business managers. The educational emphasis is found in two areas. The first is general management and embraces what the authors of this book call the managerial functions. The second is concerned with education in such fields as marketing, personnel, office management, finance, insurance, manufacturing, and packaging. In these areas the stress is laid upon good practice.

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[7] *Ibid.*, p. 280.

The association does not purport to appraise managerial personnel. It has no program for evaluation. But it does get at the matter somewhat obliquely through the emphasis it places on the principles of general management. Although its members are drawn primarily from business, the door is opened wide to include college professors, government administrators, and others interested in management. Consequently, it may be confidently asserted that the association, since its founding in 1922, has made marked progress in getting business executives to understand their function better and to evaluate their own performance in the light of this understanding. The American Management Association is perhaps the principal catalytic agency for the development of management principles in the United States.

Appraisal of Management: Other Programs

Occasionally there have appeared in print questionnaires that managers are encouraged to answer in order to determine their personal effectiveness.[8] The valuations are totaled on a scale running from poor to outstanding, or on a numbered scale. The former method makes no provision for weighting, while the latter method weights individual questions through the medium of assigning different numbers to each item.

Perhaps the best that can be said for management appraisal through the check-list system is that it does no harm and may, conceivably, do some good. If the individual manager is honest in his estimates, analyzes the report in order to discern areas of poor performance, draws up a plan to correct faults and achieve improvement, and actually carries out the program, there can be a positive advantage in using self-appraisal methods.

The shortcomings and positive dangers in relying upon the disclosures of the completed check list arise from the subject matter covered in such forms, the way questions are worded, and the extreme difficulty of providing appropriate answer forms. The assumptions made by the authors of a check list about the subject matter are decisive in their effect on the quality of the appraisal. A person who feels that managers are mainly concerned with human relations will tend to emphasize these and neglect other functions.

Hence, the necessity to cover evenly the several managerial functions is of first-rate importance. Similarly, the choice of question and answer form, although mechanical in nature, encounters difficulties in the form of semantics and the complexity of a function. Words like "responsibility," "delegation," or "centralization" have many connotations. The author of the check list presumes that his understanding is generally acceptable and frames his question on that basis. Until a glossary of terms is available, there seems little possibility of achieving a common understanding. Or again, the questionnaire may employ single answers or multiple-choice answers on the assumption that there is one correct response. Such may not be the case. The correct action in a given situation may involve several steps that are not mutually exclusive. College professors who have wrestled with objective tests know only too well the numerous pitfalls encountered in devising appropriate questions.

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[8] See, for example, "How Good an Executive Are You?" *Modern Industry*, vol. 24, no. 5 (May, 1952).

Appraisal of Management: Some Conclusions

The foregoing analysis points to several rather clear conclusions about the current status and prospective trends in the area of management appraisal. In the first place, the attempt to appraise the quality of managers is not new. There is a great deal of evidence that appraisals have been made, although their crudity is apparent. Political leaders have been toppled from power; heads of religious and educational institutions have experienced the favorable or unfavorable results of appraisals of their stewardship; and business managers have felt the punishment for failure as well as the reward for success. Even today the evaluations of top-level managers frequently take considerable time, and an inordinately long service is frequently undeserved. At the same time, the judgment made of middle- and lower-level managers by their respective superiors is still a crude but decisive thing.

In the second place, the historical method of appraisal has been indirect. Evaluations have started from reports of unfortunate events. The responsibility for them has been assigned, either by hunch or by careful detective work, on a personal basis. The indirection of this procedure, its chance of error, and its great cost have resulted in the identification of personal responsibility in only the more flagrant cases. Most of the time, knowledge of an error does not lead to personal blame. Consequently, the indirect procedure is an unsatisfactory means of appraising the quality of management.

A third conclusion concerns the growing importance of direct appraisal of managerial skills. As a theoretical possibility this method has long been very attractive. Its important advantages include the direct, purposeful, and regular evaluations of all managers and the confidence that is engendered when appraisers know what they are doing. It has been impossible, as a matter of fact, to implement this approach until quite recently because it rests upon the existence of managerial principles and their understanding by managers. It is now possible to take the first steps toward this method of appraisal, and its extended use may be forecast in the relatively near future.

It should not be assumed that in the transition from indirect to direct appraisals that there will be little or no need for control records. These will always be essential for determining where the enterprise is and where it is going. The difficult subjects of strategic controls and improved reporting will remain, but they should be dealt with as issues entirely separate from the evaluation of the quality of managership.

Finally, the theoretical advantages of direct, as opposed to indirect, appraisal of managers are so pronounced that the future course of managerial research and educational effort should be actively supported by executives in all enterprises. The gaps in present-day knowledge have been pointed out at every opportunity in the writing of this book. The inadequate education of managers in their functions has likewise been high-lighted. The cooperation between management associations, universities, enterprise executives, and others interested in management research and educational effort along these lines will yield rich dividends in making more efficient and more effective the task of joint human endeavor.

Selected References

Allen, G. H. (ed.), *Individual Initiative in Business*, Part II, Sec. 4. Cambridge, Mass.: Harvard University Press, 1950.

Dimock, M. E., *The Executive in Action*, Chap. 21. New York: Harper & Brothers, 1945.

Dooher, M. J., and V. Marquis (eds.), *The Development of Executive Talent*, Chaps. 29, 30. New York: American Management Association, 1952.

Hooper, F. C., *Management Survey*, Chap. 6. London: Sir Isaac Pitman & Sons, Ltd., 1948.

Martindell, J., *The Scientific Appraisal of Management*. New York: Harper & Brothers, 1950.

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